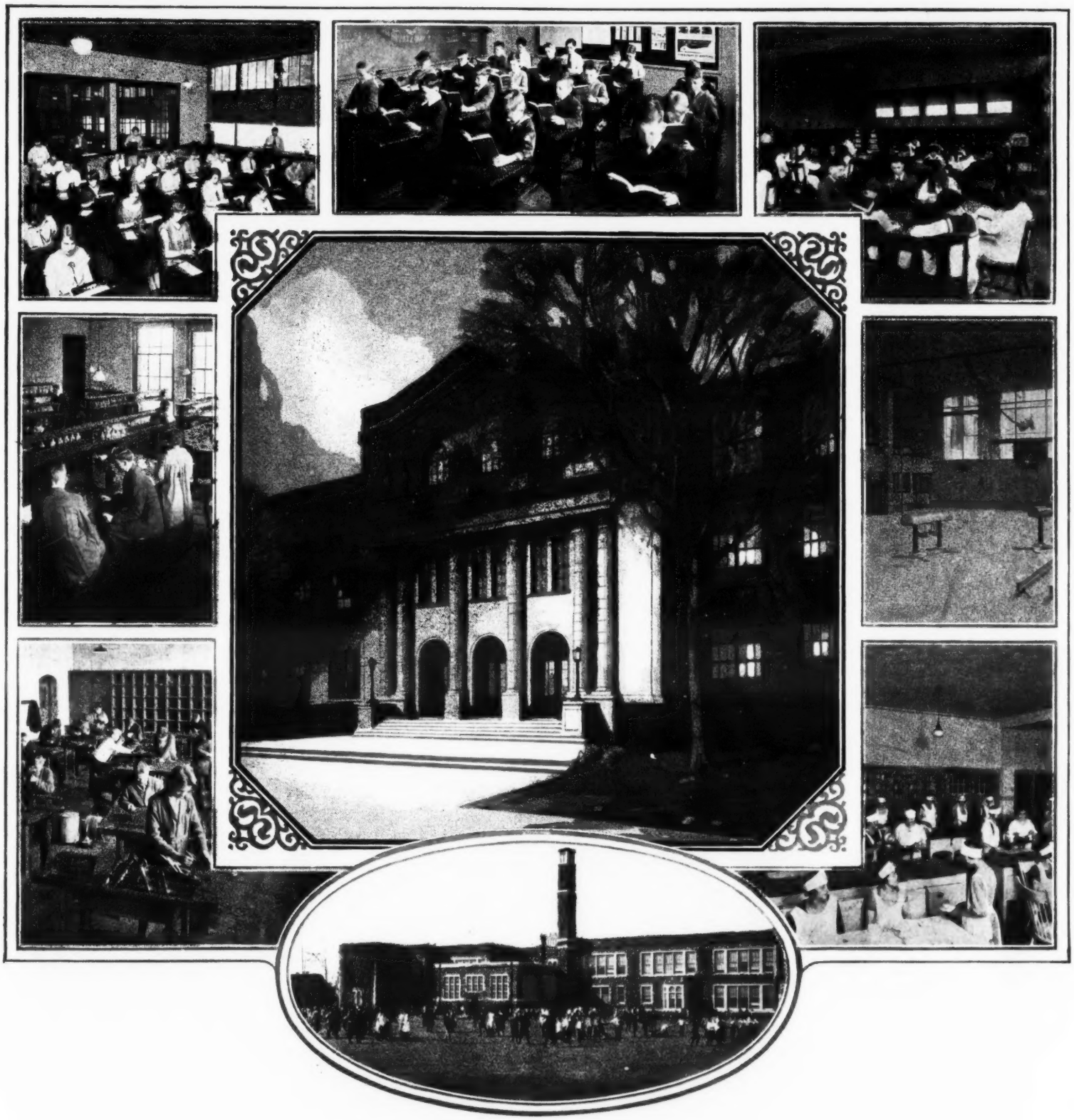
THE AMERICAN
School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION



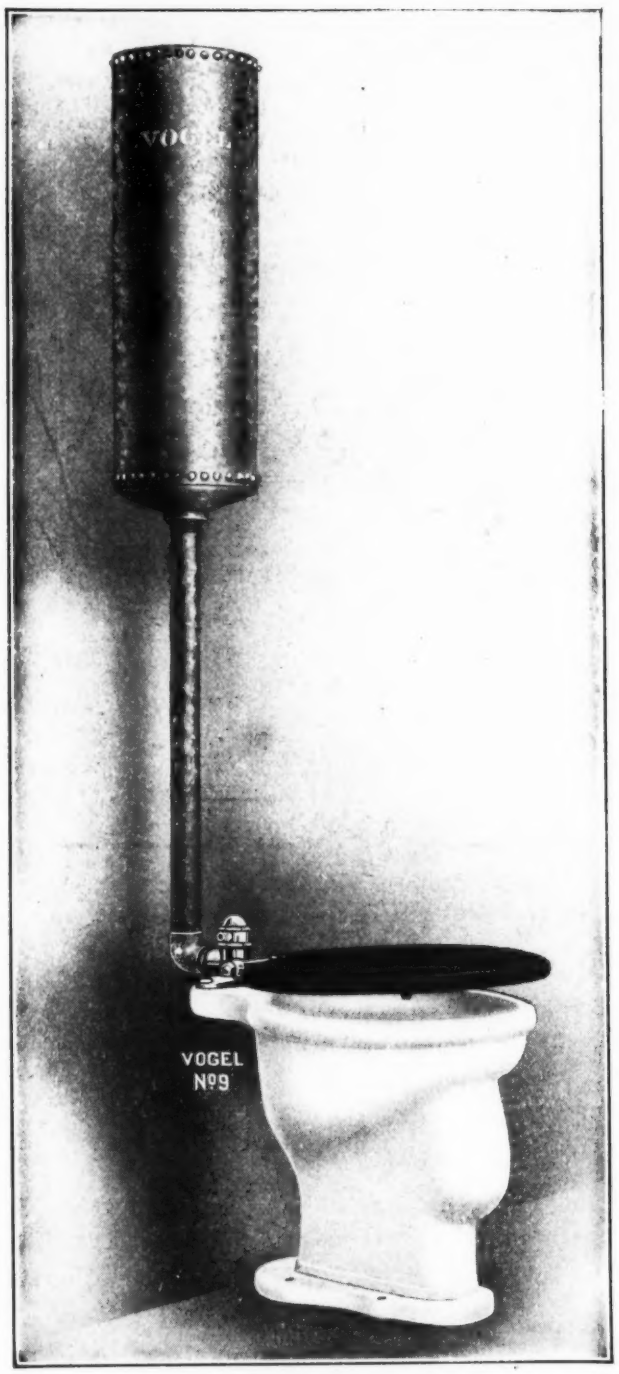
February, 1928

The Bruce Publishing Company
Milwaukee, Wisconsin

VOGEL

PATENTED

Number 9 Automatic School Water Closet



This closet is made to stand the rough usage of the school water closet.

Economical in the use of water.

Seldom requires repairs.

Easy of access when repairs are necessary.

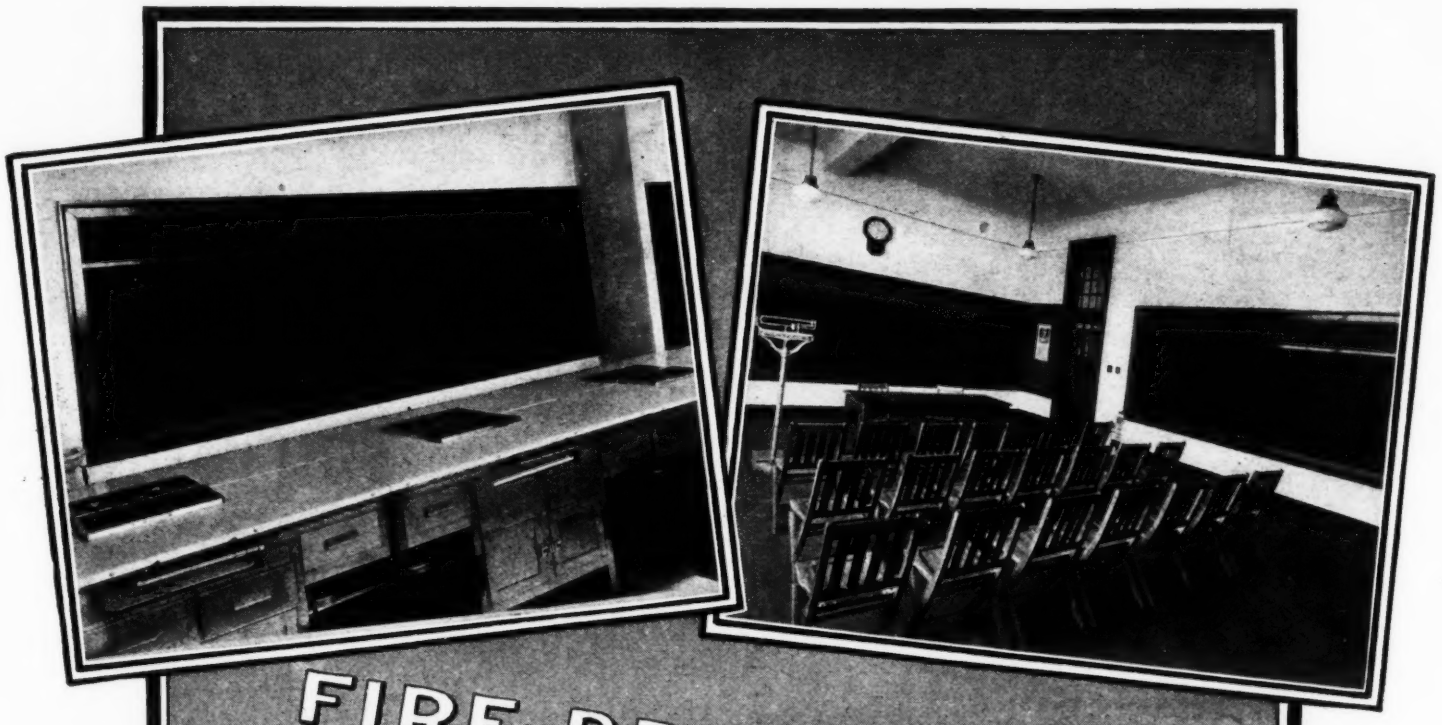
The simplest and most durable automatic water closet.

Many Thousands in use.

Sold by Wholesalers of Plumbing Supplies Everywhere

JOSEPH A. VOGEL CO.

Wilmington, Delaware **St. Louis, Missouri**



NATURAL SLATE BLACKBOARDS MEET ALL MODERN SCHOOLROOM REQUIREMENTS!

Natural Slate Blackboards are in the finest schools of the country—where school Authorities realize that they are the shortest cut to conserving taxpayers' money. Natural Slate Blackboards make teachers' tasks much easier and bring better results to pupils' efforts—in fact they are a valued asset from every standpoint.

Despite the ravages of hard wear, Natural Slate Blackboards are always like new—replacement is never necessary.

Write for interesting data and information on Natural Slate Blackboards.

NATURAL SLATE BLACKBOARD COMPANY
208 ROBINSON AVE., PEN ARGYL, PA.

NATURAL SLATE BLACKBOARDS

Branch Offices in Principal Cities

BEVERLY HIGH SCHOOL

Beverly, Mass., is proud of its High School—an architectural masterpiece, a model of convenience, comfort, and safety. In line with standard practice, it has a Barrett Specification Roof.

Architect: Adden & Parker, Boston. Contractor: William H. Cann, Beverly, Mass. Roofer: Geo. W. Horne Co., Lawrence, Mass.

School Roofs that can be laid — and forgotten

Survey the fine school buildings of the country and you'll find the great proportion have Barrett Specification Roofs.

And there are sound reasons for that fact:

In the first place, a 10 or 20-year Surety Company Bond goes with each Barrett Specification Roof — a bond that guarantees the owner of the building against repair or maintenance expense for the life of the bond.

Moreover, many architects and School Board members have learned that hundreds of roofs of this type, laid 30 or 40 years ago, are still giving staunch weather-tight service—and this without a cent of expense for roof repairs.

And then there's the fire-safety factor. It's proved that if burning brands fall on the slag or gravel surface of a Barrett Specification Roof, they burn themselves out without doing serious damage. If a fire inside the building weakens the roof deck, the Barrett Specification Roof has the necessary tensile strength to support itself over a large area, thus effectually blanketing the fire. The National Board of Fire Underwriters gives the base rating to Barrett Specification Roofs.

In a nutshell — Barrett Specification Roofs have proved themselves exceptionally right for school buildings. And this fact has become known to School Boards.

A Valuable Service

Without charge or obligation, a Barrett Service Man will inspect your roofs. He will render an unprejudiced report on their condition and explain upkeep methods that often save expensive repairs.

This free inspection service is offered to schools with roof areas of 5,000 square feet or more that are located east of the Rocky Mountains. Address Inspection Service Department.

THE BARRETT COMPANY
40 Rector Street, New York City

IN CANADA:
The Barrett Company, Ltd.,
5551 St. Hubert Street, Montreal, Quebec, Canada

Barrett Specification Roofs

Printed in U. S. A.

KEWANEE STEEL Riveted BOILERS

Low Heating Cost

Here are some of the features of boiler design which are necessary to insure lower heating costs: 1; a spacious firebox so that the fuel may be burned properly, 2; ample heating surface and long and numerous flue gas tubes permitting the heat of combustion to be transferred to the water in the boiler, 3; sufficient volume of water content to absorb the heat without undue disturbance, 4; good circulation of the water content to prevent steam logging, 5; area enough to permit liberation of steam at the surface of the water, 6; steam space large enough to take care of the fluctuations of load.

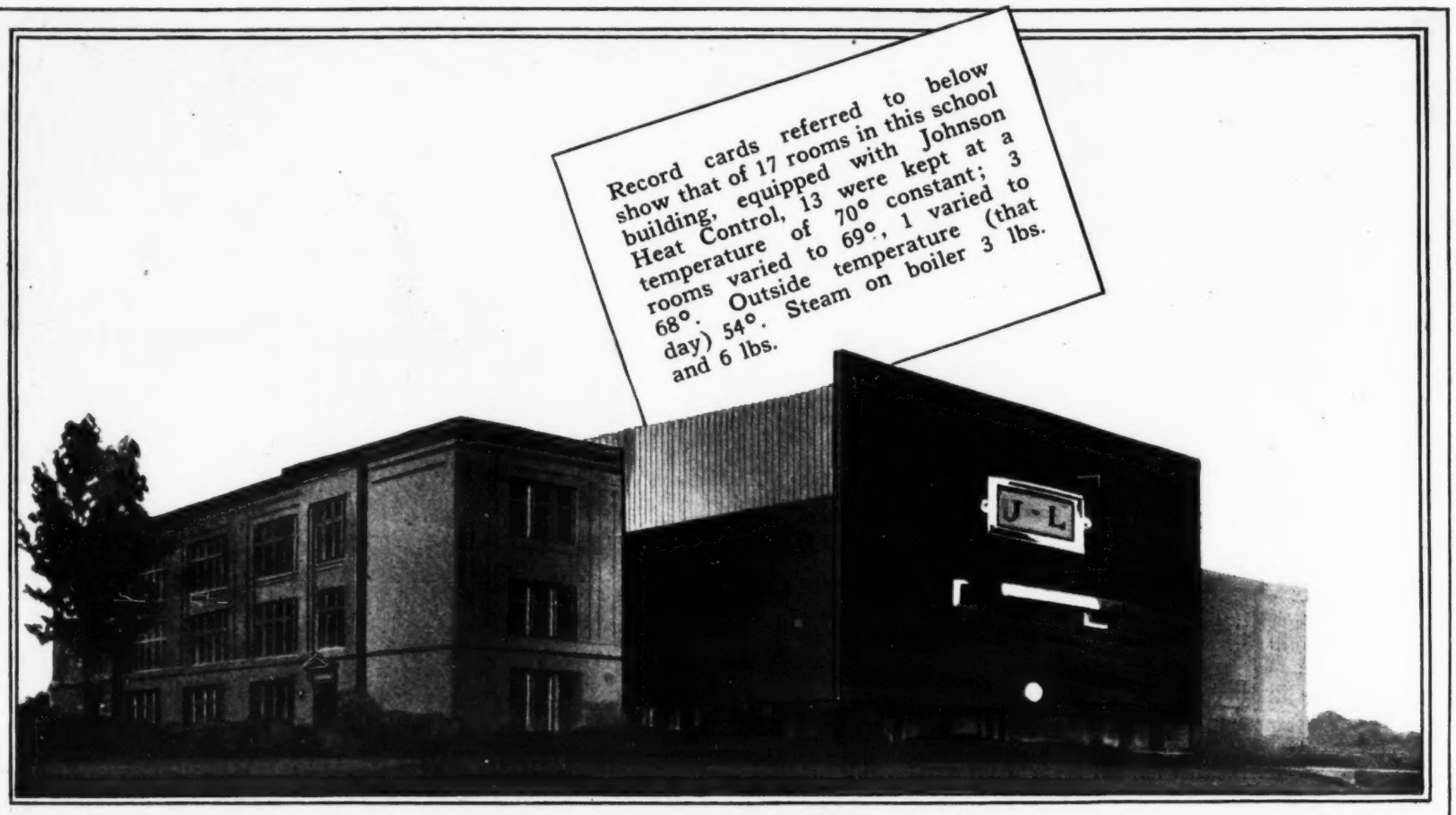
All these features and many more *are built in Kewanee Steel-Riveted Firebox Boilers.* They are a potential guarantee of low yearly heating costs.

And when you consider that *every year* a boiler's fuel may cost from ¼ to ¾ of its purchase price it is easy to see that a low heating cost is far more important than the first cost of the boiler.

KEWANEE BOILER CORPORATION

Kewanee, Illinois *Branches in Most Leading Cities*

STEEL HEATING BOILERS RADIATORS WATER HEATERS TANKS AND WATER HEATING GARBAGE BURNERS


Record cards referred to below show that of 17 rooms in this school building, equipped with Johnson Heat Control, 13 were kept at a temperature of 70° constant; 3 rooms varied to 69°, 1 varied to 68°. Outside temperature (that day) 54°. Steam on boiler 3 lbs. and 6 lbs.
J-L

JOHNSON HEAT CONTROL IN SCHOOLS

Public Schools, Ferndale and Pleasant Ridge
Royal Oak District No. 9, Ferndale, Michigan

EDGAR F. DOWN,
Superintendent

Johnson Service Co.,
Milwaukee, Wis.

Dear Sirs:

Inclosed you will find a record card showing the temperature of all rooms in the Wilson School in District No.9. This record is so close to 100 per cent perfect temperature that I was sure you would be interested in seeing it. The record covers A.M. and P.M. readings of October 28.

In School District No.9, 90 per cent of the school buildings are now equipped with Johnson System Of Heat Control.

Very truly yours,

Supervisor of Schools
District Number Nine.

Johnson Heat Control, in hundreds of schools in all parts of America, maintains a constant predetermined indoor temperature regardless of outdoor temperature and changes: and also produces a fuel saving of from 25 to 40 per cent. Complete details furnished on request.

The Perfect Graduated, Intermediate Heat Regulation . . . And Dual Thermostat (Night And Day) Control.

JOHNSON SERVICE COMPANY

Main Office and Factory . . . . . MILWAUKEE, WISCONSIN

AUTOMATIC TEMPERATURE REGULATION SINCE 1885 — BRANCHES IN ALL PRINCIPAL CITIES

For Greatest EFFICIENCY

STEEL HEATING BOILERS

In big buildings—where the economical burning of fuel means the savings of thousands of dollars every year—one invariably finds heating boilers of STEEL.

Efficiency records of more than 80%*—20% better than heating boilers generally average—are not uncommon with STEEL boilers.

For steel is the one material adaptable to boiler designs known to be most efficient. And this is but one of the reasons why nothing is as good as steel for heating boilers.

*In an actual "on the job" test, conducted under rigorous conditions, a steel heating boiler (Oil Fired) recently showed an efficiency of 83.05%

HEATING BOILERS DIVISION

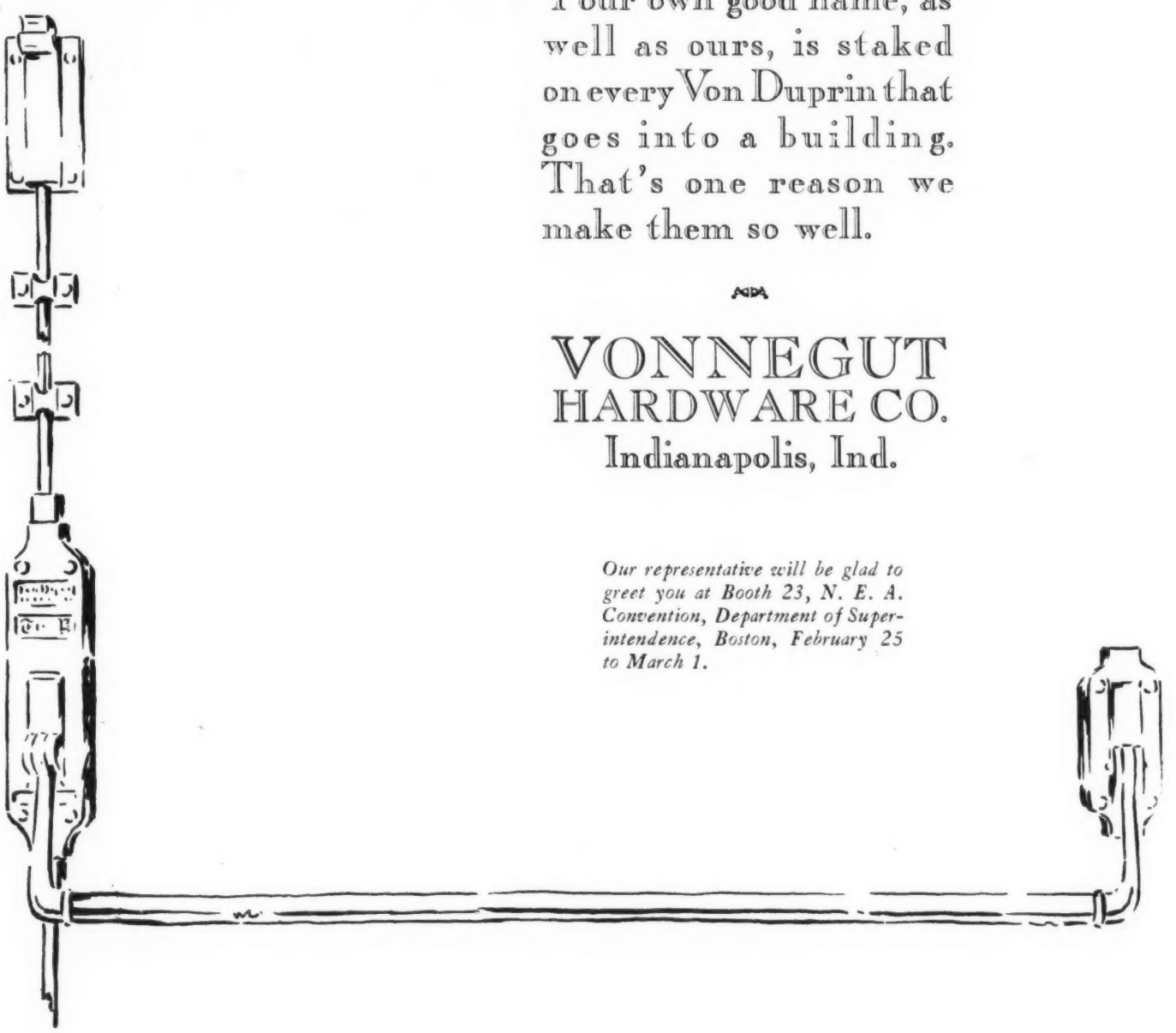
The American Boiler Manufacturers Association

Von Duprin

Self-Releasing Fire Exit Latches

Sweets, Pages B2036-2039

AIA 27c5

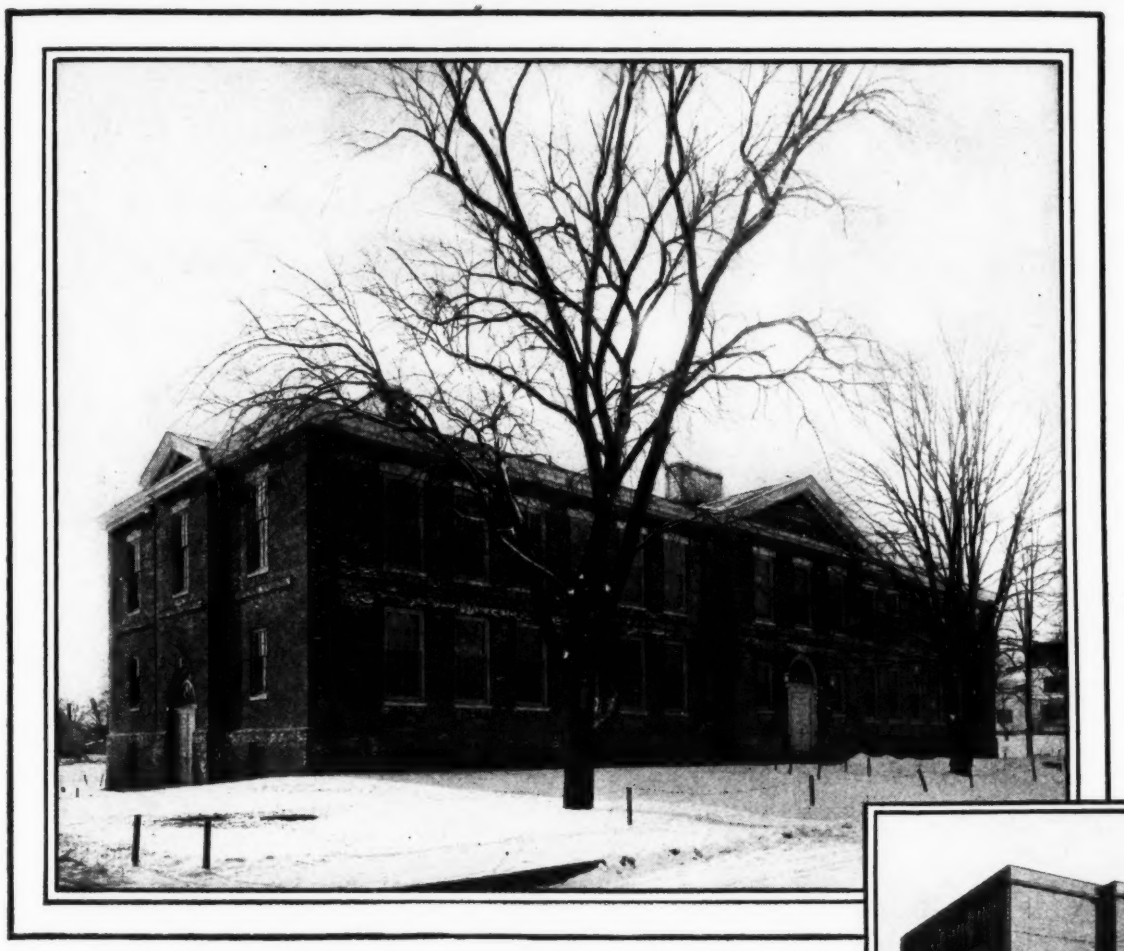


Your own good name, as well as ours, is staked on every Von Duprin that goes into a building. That's one reason we make them so well.

AIA

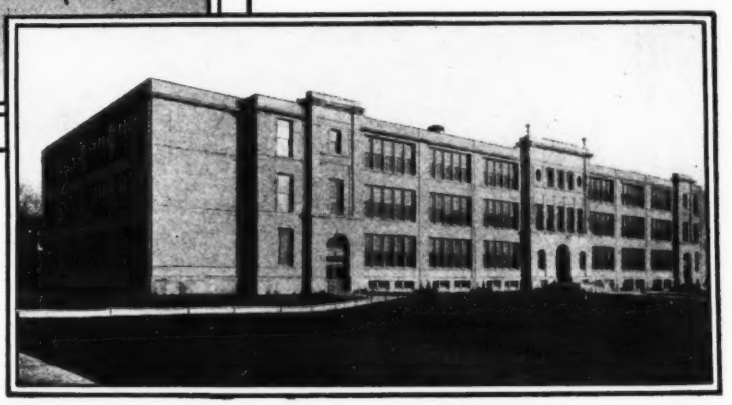
VONNEGUT
HARDWARE CO.
Indianapolis, Ind.

Our representative will be glad to greet you at Booth 23, N. E. A. Convention, Department of Superintendence, Boston, February 25 to March 1.



An extra strong spring, rust-proof ferrules of brass and nickeled fixtures are exclusive features which give the Columbia Roller longer life, greater lifting power and silent operation.

MASSACHUSETTS STATE NORMAL SCHOOL
Bridgewater, Mass.
Architect, Guy Lowell of Boston



GARDNER HIGH SCHOOL, Gardner, Mass.
Architects, Guilbert & Betelle, Newark, N. J.

It's earned the right to be called *"Hevi-Duty"*

NO one has a copyright on the word "durable." It's in the dictionary—free for anybody to use.

So is "beautiful"—"colorful"—"unfading"—"efficient"—and other highly complimentary adjectives that might truthfully be applied to *Columbia* Window Shades.

The trouble with these laudatory adjectives is that—having been freely applied to so many products that are not quite all they claim to be—the words themselves have lost all meaning.

Bearing all this in mind, we now submit for your consideration one fact about *Columbia* Window Shades which really means something.

Recentiy we checked up on several hundred well-known American buildings in which our Damasko Hevi-Duty Shade Cloth (a close-textured unfilled cambric) has been installed. We found that in many instances replacement expense was amounting to only 25 cents for each $100 of original investment.

You be the judge and jury of that evidence. Has not any window shade with such a low replacement expense record as this the right to be named Hevi-Duty?

THE HARVARD SCHOOL OF BUSINESS ADMINISTRATION, Cambridge, Mass.
Architects, McKim, Mead & White of New York
Builders, Hegeman Harris Co. of New York & Boston

The *Columbia* Mills, Inc.
225 FIFTH AVENUE, NEW YORK

Baltimore Boston Chicago Cincinnati Cleveland Dallas Detroit
Fresno Kansas City Los Angeles Minneapolis New Orleans
Philadelphia Pittsburgh Portland (Ore.) St. Louis San Francisco Seattle

Mail the Coupon

You can save time and trouble by using the "Standard Specification for Window Shades," which we'll gladly send on request. A specimen roller and samples of *Columbia* Cloth are sent with the specification. Just fill in coupon and mail to The *Columbia* Mills, Inc., 225 Fifth Avenue, New York.

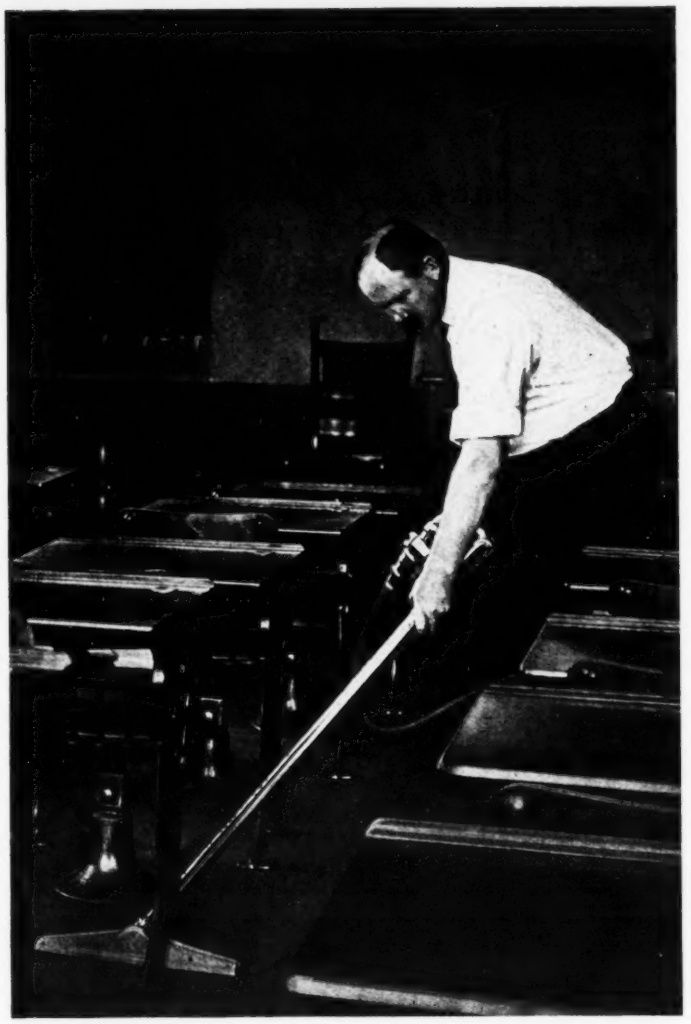
Name .....

Street .....

City ..... S 2-28

Columbia

GUARANTEED
WINDOW SHADES *and* ROLLERS



The swivel tool enables the operator to reach under desks and chairs and into seemingly inaccessible corners.

Spencer Advantages

1. Always ready for use.
2. Can be operated by anyone of ordinary intelligence.
3. Possesses an easy and perfect system of control.
4. Tools are few, simple and strong — all wearing surfaces easily, quickly and inexpensively replaced.
5. No valves, belts or complicated parts requiring constant adjustment.
6. Consumes power only, beyond the idle load, directly in proportion to the amount of work being done.
7. Has comparatively few wearing parts and consequently low maintenance cost.

The recommendations of our Engineering Department may be obtained on any cleaning problem without cost or obligation.

SPENCER

CENTRAL CLEANING SYSTEMS

Spencer Central Cleaning Systems represent the highest development in vacuum cleaning apparatus within the last decade. They include features of design, construction and operation found in no other system of vacuum cleaning.

And it is for this reason that over 1,200 Spencer Vacuum Cleaning Systems are in use in schools today—each rendering an incomparable degree of satisfactory service, which with the passing of each year, only tends to more firmly establish Spencer prestige and reliability.

School Officials, Architects and Engineers throughout the entire country unqualifiedly indorse and recommend the Spencer System as the ideal vacuum cleaning equipment for school installation.

Write for list of school installations and complete data regarding Spencer equipment.

The Spencer Turbine Company

Hartford **Connecticut**

Woolworth store at Olive and 8th St., St. Louis, Mo.

The Largest Buyers are the Wisest

GREAT retail corporations whose gigantic success has been built on wise buying use Heggie-Simplex steel boilers to insure the comfort of their customers. Trained ability to weigh every important factor in making a wise purchase has brought many of America's business leaders to this conclusion—that the most modern of heating boilers is the logical choice in modern buildings.

Heggie-Simplex Boiler Co., Joliet, Illinois. Representatives in principal cities — telephone and address listed under "Heggie-Simplex Boiler Company."

HEGGIE-SIMPLEX

ELECTRIC-WELDED STEEL HEATING BOILERS

Everyone is proud of the schools of today

EUROPE may revere antiquity, but America believes in sanitation, decoration, preservation. Particularly for schools.

L. Sonneborn Sons, Inc., are proud to have played some part in this program. All over America, schools and universities are kept beautified, and sanitary by Sonneborn School Products. The list of institutions using our products reads like a roster of the nation's schools.

Whether your building is new or old, Sonneborn Preservative Products are needed. Go over those described below and determine the ones that fit into your present requirements. We will gladly refer you to schools in your vicinity that use Sonneborn Products, so you can see for yourself the results they give and the dependable way they stand up in service.

SONNEBORN
School Products

For Concrete Floors

LAPIDOLITH TRADE MARK

the original concrete floor hardener

The concrete floors in your halls, basements and toilets should be made wearproof, dustproof, absorbent-proof. Lapidolith, the original concrete floor hardener, will do this. Floors so treated are free from dust and impervious to water or wear. They are easy to wash and can be kept sanitary.

LIGNOPHOL

for preserving wood floors

Lignophol will give new life to all wood floors by impregnating them with wood gums and oils that they sorely need. Dry heat and scrubbing take the life out of wood floors. They splinter, warp and check. They rot.

Lignophol makes them able to resist these conditions for years.

For Walls and Ceilings

CEMCOAT and SONOTINT

SCHOOL PAINTS

Cemcoat lasts longer and stays white longer than paint. It is a gloss enamel wall coating that reflects light like tile. Because of its extreme brightness, it is used mainly in recitation rooms, halls and auditoriums. Made so that it resists constant washing. Don't worry about finger marks or stains. Soap and water takes them off Cemcoat. Can be had in all colors. Sonotint is specially made for classrooms or the library. It is a velvety flat wall coating that reflects light without glare. As easily cleaned as Cemcoat.

On request, we will gladly tell you the nearest schools where any or all of the above products are in service, affording you the opportunity personally to investigate their worth.

L. Sonneborn Sons, Inc.

114 Fifth Ave., New York

COUPON

L. SONNEBORN SONS, Inc.,
114 Fifth Avenue, New York

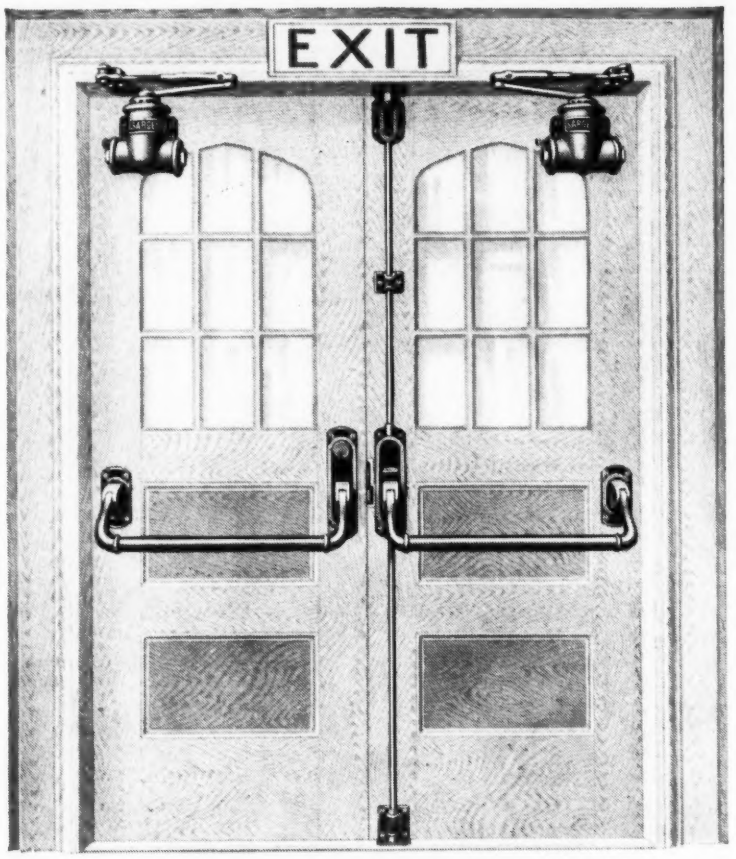
Without incurring any obligation, I would like to talk with your representative about school building renovation.

Name .....

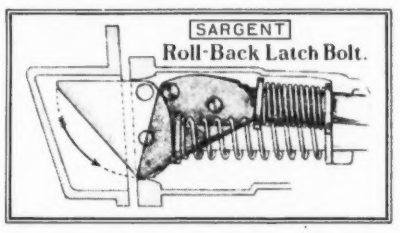
Address .....

S.B.J.-2

A new fire-exit latch bolt that *can't be jammed*



Not even the pressure of a panic-driven crowd can make the Sargent roll-back latch stick



School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic will be interested in this new development which has become the standard Roll-Back action for

SARGENT

Fire Exit Door Bolts.

The improved action is shown by the detailed drawing. The Cross Bar does not withdraw the bolts, but releases the deadlocking mechanism, allowing the bolts to be rolled back into the case of the lock as the doors are pushed open.

Security.

The Latches provide complete security and prevent entrance from the outside of the building when the school is not in session, while they can be arranged to permit entrance during school hours if desired.

Quick Exit At All Times.

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle Bars at any point.

Door Closers

close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

Pamphlet illustrating and describing Fire Exit Door Bolts will be mailed upon request.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY

Manufacturers

NEW HAVEN, CONN.

New York Chicago

Health and Comfort in the Schoolroom

IT IS easy to keep floors, walls, desks, and seats in a clean, wholesome state with Midland Schoolroom Products. Keep air pure, sweet, and pleasant with Midand Sprays. Clean, healthful surroundings mean better work by both teachers and pupils. We will be glad to prove the worth of our products in your own school.

Midland Liquid Waxoleum

Wood floors or composition floors, seats and desks, usually so hard to keep in presentable appearance—can be easily and economically maintained with Midland Liquid Waxoleum. It does not leave an oily or sticky finish. Remarkable cleansing qualities combined with a quick brilliant polish.

Midland Blackboard Cleaner

Your blackboards are easily kept BLACK with this cleaner. It absolutely removes all the scum or haze that is usually apparent on blackboards. A neutral product that is harmless to composition boards.

Midland Mint Aldehyde

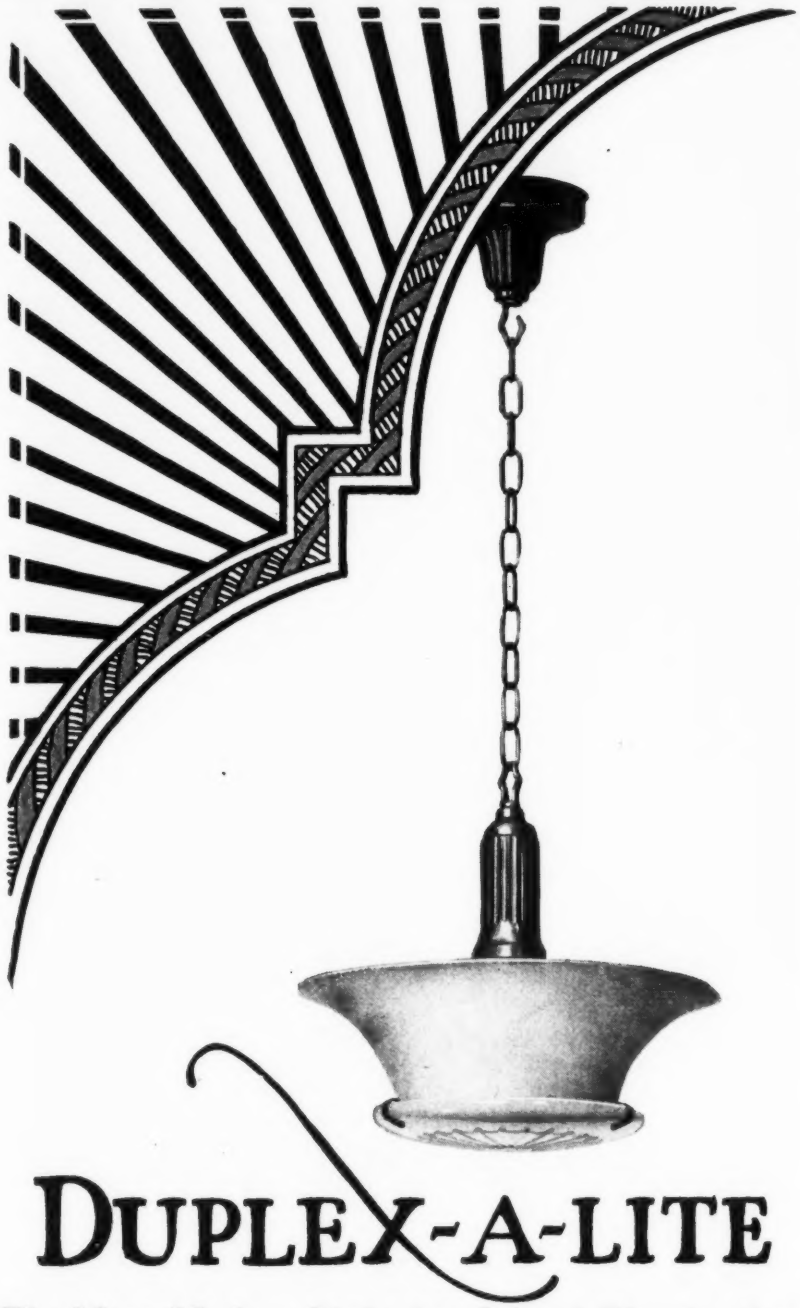
This healthful spray destroys unpleasant odors and leaves the air fragrant and clean. Midland Mint-Aldehyde has powerful deodorizing properties; it creates an atmosphere that is enjoyable, healthful and lasting.

Midland French Floor Dressing

A superior product for the finishing of floors that have just had a hard scrubbing. Midland French Floor Dressing penetrates deeply into the pores of wood exposed and forms a solid coating of protection. Apply Midland French Floor Dressing for best results.

Sales representatives are located in all principal cities. An inquiry to the home office will put you in immediate touch with the one nearest you, or order direct from,

MIDLAND CHEMICAL LABORATORIES, Inc.
DUBUQUE, IOWA, U. S. A.



DUPLEX-A-LITE

The Most Modern Light for School Illumination

Expert Authorities agree that good lighting increases class efficiency—it provides visual comfort for both teacher and pupil.

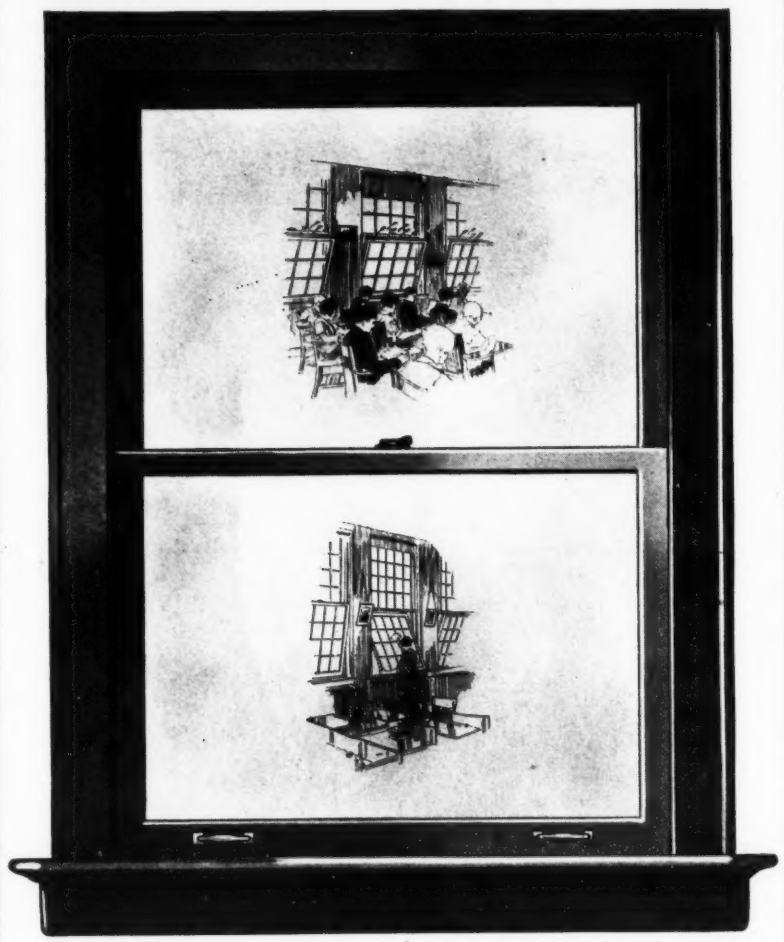
In many of the newer schools throughout the country where building committees have thoroughly investigated this subject, Duplex-a-lite installations will be found.

Duplex-a-lite provides a balanced distribution of the desired quantity of light providing even illumination—no disturbing shadows or glare spots.

Duplex-a-lites are available in variety of designs to meet particular requirements and our Engineering Department would be pleased to assist in solving your lighting problems.

DUPLEX-A-LITE DIVISION
of The Miller Company, Meriden, Conn.
Sales Offices — New York — Philadelphia — Chicago — Atlanta.

Below represents one classroom in which there is no handicap to student progress during those 123 gloomy days which occur during the year.



What is Needed
in Schoolroom Windows

SCHOOLROOM windows are designed to do two important things—admit plenty of daylight and provide ventilation. And they perform both of these functions well when they are equipped with Williams Reversible Window Fixtures.

Williams equipped windows are easily cleaned—and windows that are kept clean admit the maximum amount of daylight. Both upper and lower sash are completely reversible so that both sides of the glass may be cleaned from inside the room—safely, easily, and economically. Regardless of the weather outside, the windows are kept free from dust and dirt, thus giving students and teachers the benefit of unobstructed light area.

Ideal Draftless Ventilation

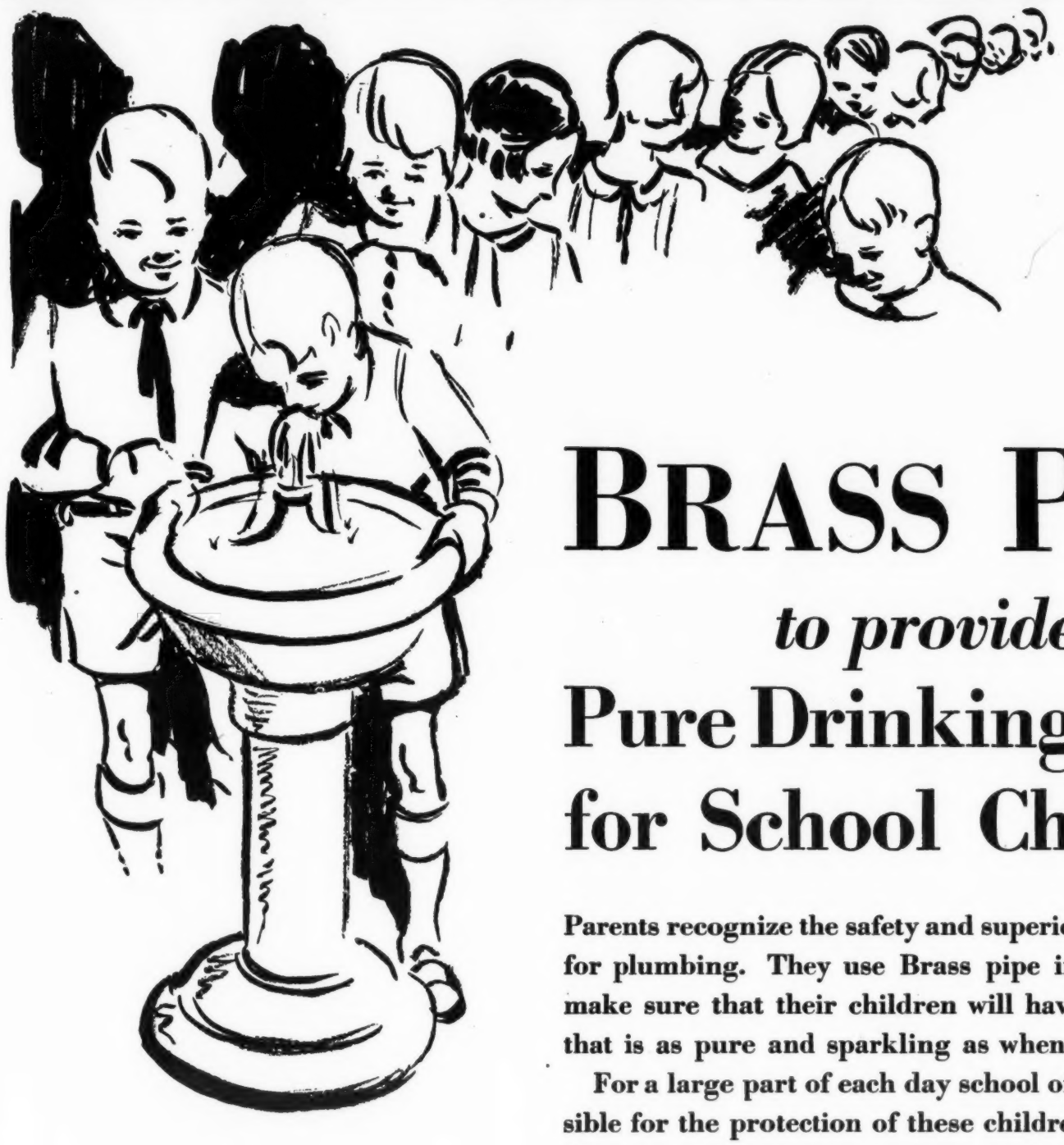
Williams equipped windows for school buildings may be of either the plank frame or double-hung type. For ventilation, either upper or lower sash may be tilted to any desired angle, deflecting incoming air upward.

School boards and architects who have used Williams equipment tell us that it best suits the needs in today's classrooms.

The Williams Pivot Sash Co.

E. 37th St. at Perkins Ave.,
CLEVELAND, OHIO

WILLIAMS REVERSIBLE
WINDOW EQUIPMENT



BRASS PIPE

to provide

Pure Drinking Water for School Children

Parents recognize the safety and superiority of Brass pipe for plumbing. They use Brass pipe in their homes to make sure that their children will have drinking water that is as pure and sparkling as when it left its source.

For a large part of each day school officials are responsible for the protection of these children. It is a duty for them to take every precaution to safeguard their health.

Water which flows through Brass pipe is free from rust discoloration and contamination which results when corrodible water pipe is used. For Brass *cannot* rust. Yet Brass pipe is not expensive.

When you equip with Brass pipe you not only make sure of pure drinking water for school children but you also eliminate repair and replacement expense. Costly frequent replacements are necessary when corrodible pipe is used.

Write for a free copy of our illustrated booklet, "Brass Pipe and Health."

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RESEARCH ASSOCIATION
25 Broadway, New York

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Fifteen years in planning and constructing School Houses
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SPECIALIZING IN EDUCATIONAL BUILDINGS

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WILL MAKE SURVEY OF YOUR NEEDS
Complete Architectural & Engineering Services by School Specialists
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Inventors of the "HOLMES" System of School Planning
Surveys made by our Educational Department
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ILLUSTRATED here is the Van Cafeteria of the Mansfield Senior High School, Mansfield, Ohio. This is an example of a large and efficient school installation.

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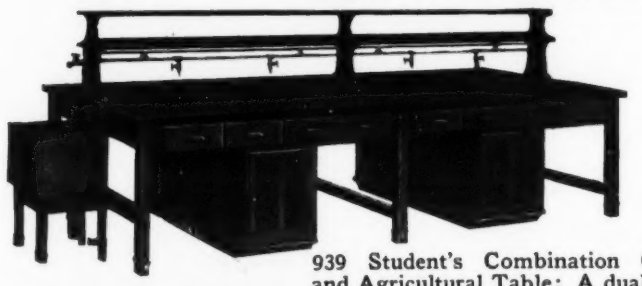
IN 1928, as in 1891, the Peterson Standards are paramount. The School Board now contemplating new, or additional equipment can place confidence in the quality and workmanship of the Peterson line.

L5060 Reading Table of improved construction assuring absolute rigidity—legs equipped with cast brass sockets.



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A rough sketch of the rooms you wish to equip will promptly bring our suggestions together with an estimate—this without obligation on your part.

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Correct posture itself is a sort of individual matter with Derby. He first responded to the wishes of educators for seating that would properly receive and support the body. The sole manufacturer under the Thompson patents, he offers today what is considered by leading orthopedists as the true posture construction.

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Old North Church, Boston's oldest standing Church.

At the N. E. A. Department of Superintendence Meeting
Boston, Mass.
February 25th to March 1st, 1928

We feature neither one desk nor one idea! But offer a line of desks in steel, sufficiently comprehensive in style and design to provide a desk for every purpose.

Desks of either stationary or movable type, proportioned to measures established by extensive research conducted by nationally known authorities in school room hygiene and practice.

Desks manufactured in a manner, of material, and by workmen approaching perfection and distributed under a National arrangement providing fifty-three sales and stock warehousing centers strategically located for quick delivery.

"The Factory is in Michigan but the* Service *is* Local *to You"

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But They Can't Break STEEL!

Those Boys and Girls— ***(They mean well but they are just children.)***

YES! We are interested in Steel Furniture for our schools. Send your catalog. PIN THIS TO YOUR LETTER HEAD

No. 64 Table.

This all-steel table may be had either in our standard olive green finish, or in white enamel. Top 42" x 26", of 16 gauge sheet steel. Splendidly braced and strongly constructed throughout. For your Domestic Science room, your Cafeteria, and many other purposes.

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Our very popular No. 1018 chair. It has hardwood seat 16½" wide by 14½" long. All other parts steel. Seat finished in mahogany unless light oak is desired. Steel finished in olive green.

Save Replacement Costs and Please The Taxpayers By Buying STEEL

CHAIRS, tables, and stools form a most important part of the equipment of every school. If they are convenient and comfortable, the efficiency of the whole school is greatly increased. If they are durable, — practically indestructible —the taxpayers' money is saved or released for other important items in the school budget.

The Angle Steel Stool Company manufactures chairs, stools, tables, and other equipment in standard sizes or to your order. It has a popular Kindergarten Chair. It has a fine Tablet Arm Chair for classroom or cafeteria use. It has all-steel tables, finished in dark olive green or white enamel, for which you would have many uses.

One minute, to tear off the coupon, pin it to your letter head, address, and stamp an envelope, will perhaps save your Board hundreds of dollars, and yourself a lot of worry. Spend the minute!

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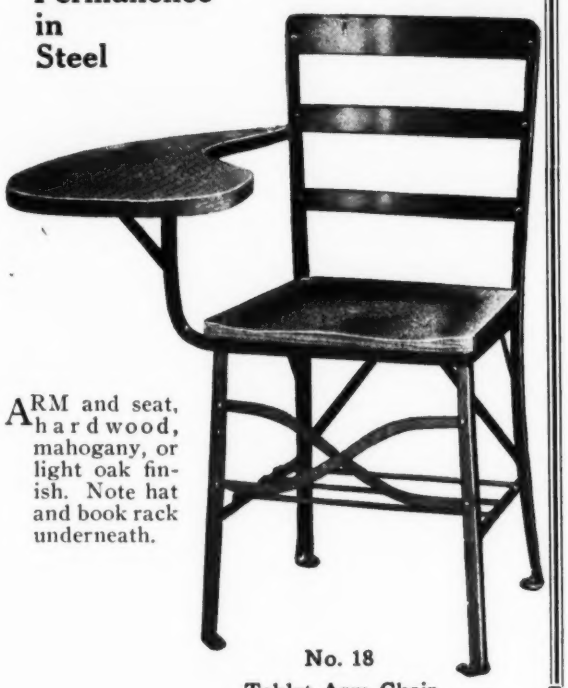

ARM and seat, hardwood, mahogany, or light oak finish. Note hat and book rack underneath.

No. 18
Tablet Arm Chair

ALLOWS FREE SPACE FOR SWEEPING

Made in three sizes
Large
Medium
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No. 600, illustrating Size "A" Desk, Open Box Style

THE "ARLO"
ADJUSTABLE PEDESTAL DESK

The "Arlo" Adjustable Pedestal Desk is our latest contribution to modern hygienic schoolroom seating. A beautiful desk, both in design and finish, it is absolutely sanitary—exceedingly well adapted to the varying needs of any classroom and guaranteed to withstand the strenuous requirements of every type of classroom service.

The pedestal is made of semi-steel, constructed to give greatest strength at the points of greatest strain. The broad, massive base is cup shaped and when screwed to the floor will never pull loose.

Visit our Exhibit Booth No. 15 at the meeting of the Department of Superintendence of the National Education Association, Boston, February 25-March 1.

The "Arlo" Adjustable Pedestal Desk will last a lifetime; has steel sides and back and the top is made from maple or birch, finished in Arlo Brown (American Walnut).

Adjustments are simple and easily made. Book box chair seat are independently adjustable. This is a distinctive feature and makes it possible to adjust "Arlo" desks to meet the individual requirements of each pupil.

The "Arlo" Line includes The Arlo Adjustable Pedestal Desk with Study Top, The Arlo Non-Adjustable Pedestal Desk, and the Arlo Pedestal Tablet Arm Chair.

Descriptive literature and prices on request.

Flexibility of adjustments assures each pupil being properly fitted, insuring correct posture and real comfort.

Arlington Seating Company

Office and Factory **Arlington Heights, Ill.**

for Cheerful Classrooms

See this Equipment at the N.E.A. Convention

In Boston

February 25th to March 1st

Boston has long been noted for its progressive educational methods. You will want to be there at the N. E. A. Convention on February 25th. Make a note to attend the exhibit of Kundtz school furniture. The Kundtz exhibit will be in sections 169 - 170 - 171.

IN the design of Eclipse School Furniture, Kundtz engineers have given first consideration to the comfort of the growing child in school. They have studied and perfected equipment that keeps the child at ease and helps him maintain correct posture. This means much to teacher and pupil alike, for a child who is not seated comfortably, cannot be expected to sit quietly nor give attention to the lesson at hand.

An invitation is extended to members of school boards and to teachers to inspect Eclipse School Furniture at the N. E. A. Convention in Boston next month. Here will be a variety of styles and models for kindergartens, elementary and high schools, each model built according to the Theodor Kundtz principles of design.

THEODOR KUNDTZ SCHOOL FURNITURE

Cleveland KUNDTZ ECLIPSE FURNITURE *Ohio, U.S.A.*

UHL STEEL

Chairs Stools Tables *for*

No. 156 "LinUhl" Chair

Cafeteria Service

NO line of furniture more practically meets the specific needs of school cafeteria usage. Excellent in appearance, splendidly suited in design, combined with built-in durability of the highest order. Complete range of styles, sizes, and finishes to choose from. Hundreds of the largest schools and industrial corporations have adopted UHL **Steel** Chairs as standard.

Comfortable, Handy, Light and SUPER-Strong

Practically No Upkeep Expense

This test shows strength of back fastenings at seat and rigidity of bracing of legs and their fastenings to seat.

Following is a partial list of schools now using UHL **Steel** Furniture with complete satisfaction. Two of these schools each have 1400 of our No. 156 Chairs (pictured above) now in service.

Lower Merion School, Ardmore, Pa.
Steubenville High School, Steubenville, O.
Upper Darby High School, Upper Darby, Pa.
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Norristown High School, Norristown, Pa.
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Our complete catalog should be in every information file on school furniture. Gladly sent on request.

THE TOLEDO METAL FURNITURE CO.
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The Toledo Metal Furniture Co.
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Name .....

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Going to the Convention?

ARE you making plans to attend the N. E. A. Convention at Boston, February 25 to March 1? If you are, make a note now to visit Booth 48, Mechanics Hall. Many plans, suggestions, and samples of equipment for your School Library and administration offices have been prepared for your inspection.

"Y and E"

YAWMAN AND ERBE MFG. CO.
SCHOOL DEPT. ROCHESTER, N. Y.

Not One Contested Collection in 1927

We closed our books for the year 1927 with no account awaiting adjustment before collection. This record was due to this one factor:

We Use Stock Samples and Match Them When We Ship!

One of the nine models popularized by us the last few years.

A movable or a fixed desk with the right finish to suit any careful buyer.

We have never "kidded" a buyer with a "dolled up" sample. The repeat business we enjoy proves the policy is right.

WELFARE SEATING COMPANY
WAUKEGAN, ILLINOIS

The LAW NON-COLLIDING SCHOOL CHAIR

Uses of the
LAW
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Biology
Bookkeeping
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will be a particular feature of our exhibit at the Convention of the National Education Association to be held in Mechanics Hall at Boston, February 25th to March 1st. Mr. O. B. Law, the originator of this new and decidedly unique school chair, will give practical demonstrations of its many advantages.

You are cordially invited to visit our display in spaces No. 30 and No. 31 on the lower floor. In addition to the Law Non-Colliding Chair, it will include various items of our established line of school seating which includes tablet arm, teachers' and chapel chairs.

The B. L. Marble Chair Company

School Seating Division

Bedford, Ohio, U. S. A.

A Complete Line of School Seating Equipment

No. 70

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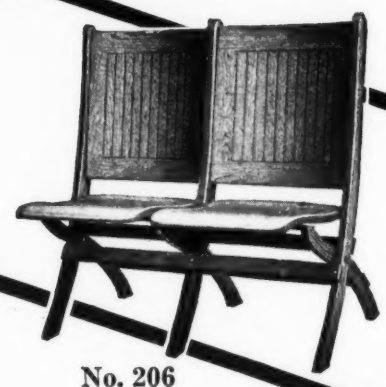
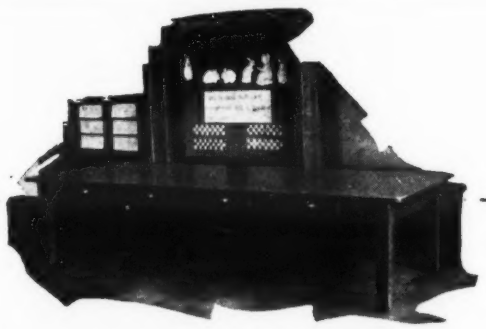


No. 206

Our seating experts are at your service. Send us your specifications. We will furnish plans and make suggestions which will be helpful to you.

THE
PEABODY
School Furniture Co.
North Manchester, Indiana

Manufacturers of School Furniture for Twenty-five Years



Hygiene Demand It

From a hygienic standpoint and a sanitary standpoint, the ELGIN SCHOOL TABLE furnishes an example of modern schoolroom improvement that should receive the serious consideration of all educators. These tables are portable, can be moved about as desired. There is no lodging place for dirt and dust. Every inch of space underneath the tables can be scrubbed with soap and water if desired. The tables themselves can be dusted from top to bottom quickly and easily. Everything about an Elgin equipped schoolroom can be kept spotlessly clean in a fraction of the time required where old stationary desks are used.

Have you our booklet, "Seating Efficiency," for first and second grades? If not, it will be sent free on request.

RINEHIMER BROS. MFG CO.
ELGIN, ILL.

DEPT. OF SCHOOL FURNITURE
ELGIN SCHOOL TABLE
ESTABLISHED SINCE 1857

MANUAL TRAINING BENCH No. 280

A GLANCE AT THIS NEW PATTERN will show that the combination of various sized drawers and cupboard makes an unusually practical bench. Notice, especially, the small drawer which is intended to hold nails, screws, small tools, etc., which so easily become misplaced when kept with the larger tools. Being able to immediately lay hands on these small but necessary items, will be the means of saving a great deal of time, thereby promoting efficiency. Also, notice the large cupboard, which will hold such tools and materials which can not be kept in the general or three private drawers. Bench is equipped with our Abernathy Rapid Acting Roller Nut Vise No. 70D on front, adjustable stop and dog.

C. CHRISTIANSEN
Manufacturer of this line since 1898
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COLUMBIA SANI-STEEL INDIANAPOLIS COLUMBIA SANI-STEEL INDIANAPOLIS COLUMBIA SANI-STEEL INDIANAPOLIS

INDESTRUCTO SANI-STEEL DESKS AND CHAIRS

COLUMBIA INDESTRUCTO CHAIR DESK

Back slats adjustable; Height and tilt of top adjustable; Top leveling Device.

Large—$4.95; Medium—$4.80; Small—$4.65.

Dovetailed hardwood drawer A $1.50; Book Drawer with steel sides and bottom B $1.15; Swinging flush top ink well 15c.

The 24 good points of a school desk as established by a committee of leading educators are incorporated in this desk. They are listed here.

INDESTRUCTO'S POINTS.

1. Seat of proper height.
2. All corners rounded.
3. Seat saddled to fit body.
4. Seat of proper width.
5. Seat tilted higher at front.
6. Back tipped backward slightly.
7. Back curved to fit body.
8. Back adjustable in height.
9. Back of solid quartered oak.
10. Seat extends slightly under top.
11. Desk height adjustable to child.
12. Desk slant adjustable.
    11 and 12 constitute a Tilting Top.
13. Curved front feet give same strength and effect as separate support.
14. Desks easily moved for sweeping.
15. Noiseless, no hinges or swivels.
16. Arm rest extended backward.
17. Simplicity—Examine illustration.
18. Durability—Indestructible steel.
19. Finish, dull, lasting quality.
20. Flush top inkwell, noiseless, removable.
21. Box or sliding drawer.
    May be used on either side.
22. Nothing to catch dirt.
23. Pencil groove on top.
24. Top leveling device.

SANI-STEEL INSTRUCTOR'S DESKS

Here is a modern desk for the modern school. This desk can be had with two drawers at $13.00; with four drawers at $17.00; with five drawers at $19.50. It has a steel frame and body that is finished dark olive green. The top and drawers of fine-ply built up quartered oak, finished dark golden. Made in two sizes.

SMALL TABLET ARM CHAIR

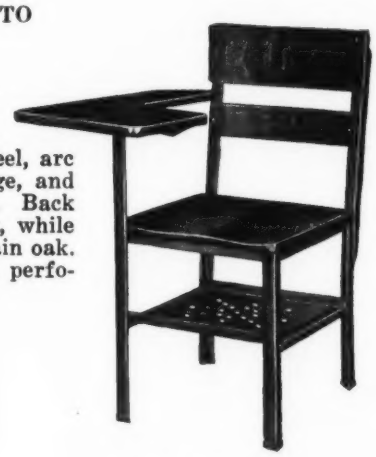
The illustration below shows the small tablet arm chair, especially adapted for use in elementary schools. The design and construction of this chair is such that it will withstand severe usage and will meet every requirement for a tablet arm chair in the elementary schools. Price $25.00 per dozen.

TEACHERS' CHAIR

This chair can be used for Teachers, Visitors, or the Library. It is good looking and dignified. Oak seat and quartered oak back are finished dark golden or brown. Has an olive brown steel frame. Priced at $2.85 each.

COLUMBIA INDESTRUCTO TABLET ARM CHAIR

To the right is an illustration of the Columbia Indestructo Tablet Arm Chair. The frame is of steel, arc welded to prevent breakage, and is finished in olive green. Back slats are of quartered oak, while the seat and arm are of plain oak. Price of each $4.25; with perforated shelf $.25 extra.



LIGHT WEIGHT TABLET ARM CHAIR

The illustration to the left shows our tablet arm chair of slightly lighter construction, but amply strong. Price of each $3.75.

COLUMBIA INDESTRUCTIBLE KINDERGARTEN CHAIR

Here is our Indestructible Kindergarten chair. It is sturdily constructed with a saddled oak seat and curved quartered oak back and a solid steel frame. Made in three sizes. One dozen weigh 110 lbs. and are priced at $18.75. Also the Elementary Tablet Arm Chair at $25.00 per doz.

The Columbia Indestructo line has been developed to meet the changing needs of the school. We have faithfully tried to build better and stronger desks and chairs for school use. We invite your scrutiny of any of our line. Tablet Arm Chair of slightly lighter construction, but amply strong at $3.75.

Visit us at Booth No. 4, at the N. E. A. Convention, Boston, Feb. 25th to March 1st

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INDIANAPOLIS, IND.

Stacks Flat for Convenience of Storage

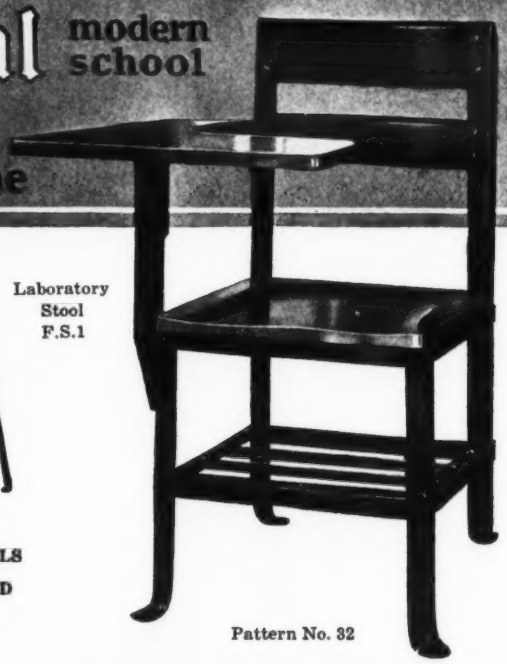
THE compactness with which the Standard Non-Tipping Chair folds represents economy, in that very little floor space is required for storage.

Many advanced features only to be found in the Standard Chair Line developed through our years of exclusive chair manufacturing will add many years of service to your seating problems.

Standard Folding Chairs are made in a variety of styles, write for descriptive catalogue and prices.

Standard Manufacturing Company,
Cambridge City, 1020 S. Foote Street Indiana, U. S. A.

Royal modern school seating is supreme



Laboratory Stool F.S.1

LABORATORY STOOLS
FOLDING CHAIRS
KINDERGARTEN AND LUNCH ROOM FURNITURE

Pattern No. 32

Folding Chair No. 128

Royal School Furniture has built an enviable reputation for strength, posture, comfort, and finish. Thirty years of experience in the manufacture of Metal Furniture and the designing of seating to meet special requirements is reflected in the superiority of present-day Royal School Furniture.

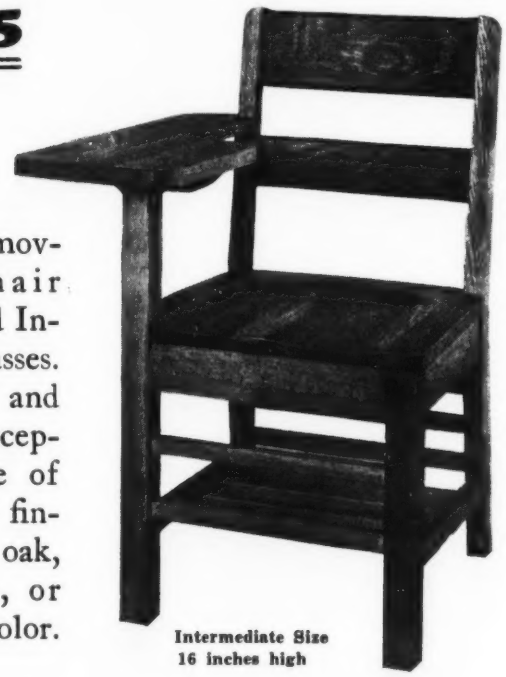
See our Exhibit
Boston Convention
Space No. 33

Samples sent for free trial at no expense—no obligation.

ROYAL METAL MANUFACTURING CO.
METAL FURNITURE SINCE '97
1130 South Michigan — Chicago, Ill.

Sturdy School Chairs
AT LESS THAN WHOLESALE PRICES

$4.95



A MODERN, movable chair for Junior and Intermediate classes. Writing arm and book rack. Exceptionally made of selected oak, finished in light oak, golden oak, or fumed oak color.

Intermediate Size
16 inches high

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135th ST. & WILLOW AVE., N. Y. C.

With the Famous Moeser Extended Arm Rest

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W. J. HAMILTON, Superintendent of Schools, Oak Park, Ill., wrote:

"The arm rest on the desks is the best thing that we have found to insure erect posture, and the pupils assure us that the seats are more comfortable and more convenient for desk work through the addition of this arm rest. Our Board is placing a large order for further installations of this type desk.

"In Oak Park we have tried out practically all the various makes of school seats and find that there are several excellent models on the market. However, it is the judgment of our building department, our teachers, and interested parents that the National School Equipment seating types meet our requirements the best of any. The workmanship is of the very best, quality of wood and materials is not equalled by any other makes that we now have, while the hygienic physical features are the best of any seating that we have in stock."

A Wonderful Finish That Does Not "Scratch"

We have developed a remarkable finish, by which the tannic acid in the wood is brought to the surface, bringing with it the natural color of the wood. The finish is developed within the fibre, consequently it cannot wear off nor rub off.

It has a richer, deeper color and a velvety "feel." It is both "hard" and "elastic"; also transparent. It is very pleasing and will harmonize with any interior finish. Woods treated by this process wear longer and retain their original finished appearance longer.

Ask us about it.

All These Advantages With the Moeser Arm

—Available working surface more than doubled.

—Full support for the back while writing.

—Arm supported while writing, resulting in better penmanship and less fatigue and nervous strain.

—Correct posture, encouraged by this Arm, insures protection from direct and reflected glare on the eyes.

—No necessity to twist body or incur strain on the spine.

The efficiency of the teacher's work depends upon the degree of intelligent reciprocation on the part of the pupils—

And that reciprocation is determined, to a remarkable degree, upon their comfort.

The Moeser Supporting Arm Top can be furnished with any National School Desk.

For complete information regarding the Moeser Extended Arm on School Desks, or concerning any other design of School Desk, write for circulars.

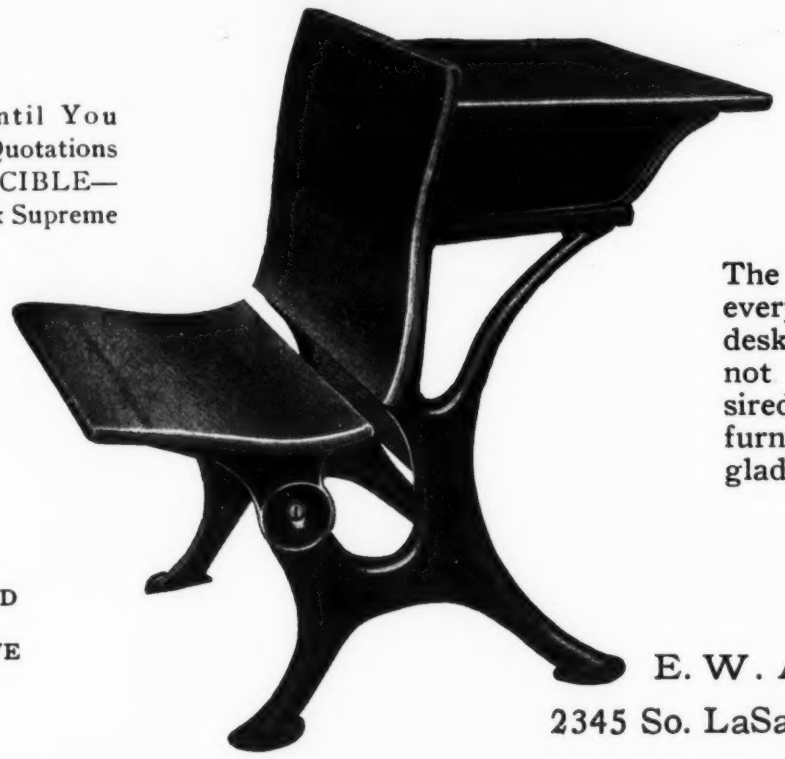
THE NATIONAL SCHOOL EQUIPMENT CO.
MANUFACTURERS OF COMPLETE SCHOOL EQUIPMENT
PORT WASHINGTON WISCONSIN

NATIONAL School DESKS
"Famous for Comfort"

INVINCIBLE

TRUE TO NAME

Don't Buy Until You Have Obtained Quotations on the INVINCIBLE—The School Desk Supreme



The Rowles Line embodies every practical type of desk. If the Invincible is not the type of desk desired send for our complete furniture catalog. We will gladly mail it on request.

GUARANTEED FOR TWENTY-FIVE YEARS

E. W. A. ROWLES CO.
2345 So. LaSalle St., Chicago, Ill.

Now New

An All-Wood Folding Chair
THAT'S

EASY to open—
EASY to close—
EASY to stack—
EASE-y to sit in—
Strong as an ox—
Won't rattle—
Won't warp—Can't rust—
No sharp corners—
AND
"No metal can touch you."

Folds Flat

Here's the Chair that's THERE! It stands abuse and the roughest of service. It may be knocked around for it's as tough as a yegg. Open and close it with your foot—easily and quickly.

Won't Tilt — Peerless TUCK-A-WAY PATENTED Reg. U. S. Pat. Off. — Well Built

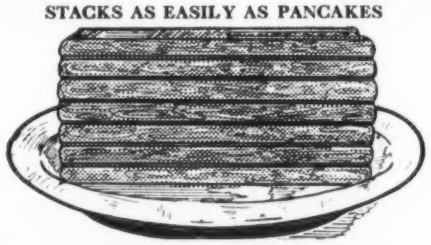
The ideal assembly chair—sold singly or in sections. As strong as an ox; no metal stampings to come loose, tear the clothing or pinch the seat; no rattling; no sharp corners; waterproof varnished—won't turn white or warp if left out in the rain. And withal — IT'S A CHEAPER CHAIR. Also made in Junior size for tiny tots.

SEND FOR SAMPLE CHAIR AND PRICES

Write for sample chair (use the coupon) and inspect it yourself. Secure quantity prices.

TUCKER DUCK & RUBBER CO., Fort Smith, Arkansas

STACKS AS EASILY AS PANCAKES



Send Sample Chair & Prices
Name .....
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Address .....
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E-4

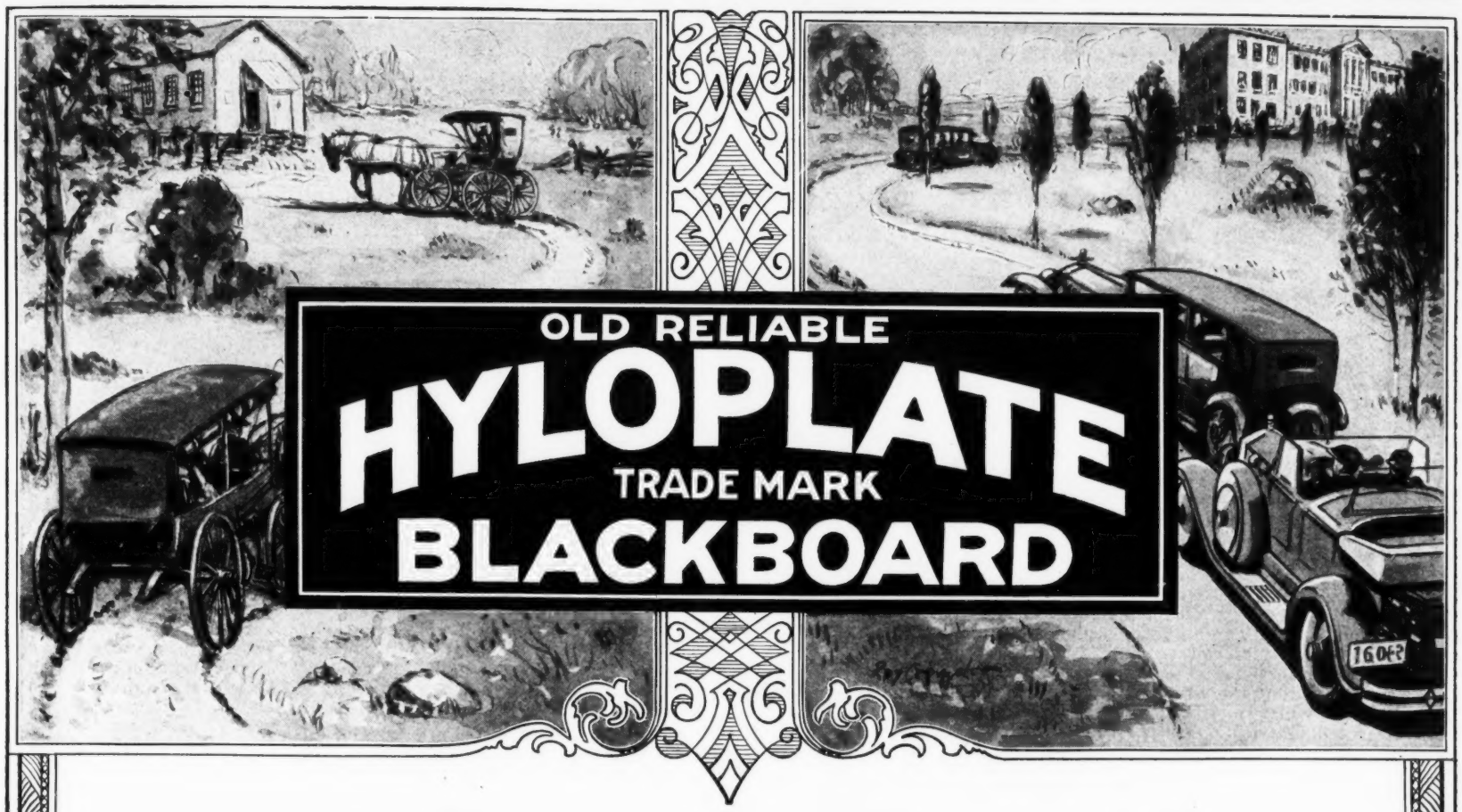
In nearly eighty-five per cent of the great public and private schools and colleges of America, Vul-Cot is the standard waste basket—and why?... Because it is one basket strong enough to withstand the rough-and-tumble treatment it is sure to get in school service. Again, because its solid sides and bottom will not let even chalk dust sift through onto the floor—

At Stationers and School Supply Houses

VUL-COT

- the national wastebasket

NATIONAL VULCANIZED FIBRE CO., Wilmington, Del., U. S. A.



Since the Days of the Horse and Buggy
...*for More than 43 Years*...
The Most Popular of Manufactured Blackboards

In schools throughout the United States . . . and in 22 foreign countries . . . Old Reliable Hyloplate is the most popular of Blackboards. Millions of square feet of this economical, quality blackboard have been installed and are serving the school children of the world today!

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Old Reliable Hyloplate will not warp, chip, crack or break. It is hard, close-grained, with a velvet-smooth writing surface of world-wide reputation. As efficient as it is economical, its many advantages merit the most serious consideration for every blackboard requirement.

Send for Free Sample

Send the coupon for catalog, all the important facts, and a free sample of Hyloplate.

Weber Costello Co.

Chicago Heights — TIME TESTED W.C. SCHOOL SUPPLIES — Illinois

WEBER COSTELLO CO.
Dept. AH2, Chicago Heights, Illinois

Gentlemen: Please send me *Free of all charge* a sample of *Old Reliable Hyloplate Blackboard* together with detailed information. It is understood that this obligates me in no way.

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Choose to meet your requirements

Among these three Beckley-Cardy products you will find the blackboard to suit exactly your requirements for quality, service, and price. Each, in its class, is the finest blackboard which either nature or the technical skill of man can produce.

SLATEBESTOS
The Permanent Blackboard

SLATEBESTOS, the permanent blackboard, has established a new standard of excellence. It is the finest blackboard made and far superior to natural slate, because it is equally durable and less subject to breakage, is more fire resisting, actually improves with age, costs less, has extreme density with almost no expansion, is lighter and is more easily installed. Its dense, uniformly smooth, non-reflecting surface is of a texture to take chalk so that it produces a clear white legible mark which may be easily and quickly erased. There is no other blackboard comparable with Slatebestos.

Slaterock Blackboard
Natural Slate's Rival

SLATEROCK has, as its name implies, a base of rock with a slate surface. This combination produces a material which is unaffected by moisture or temperature and which therefore cannot warp, crack or buckle—a distinct advantage over the many pulp or paper boards which are offered at an equal or greater price. The writing surface of Slaterock is a rich, deep, blue-black, which contrasts far better with chalk than does the gray surface of natural slate. There is not a blackboard on the market, at an equal price, which compares with Slaterock.

Slatoplate

SLATOPLATE, dependable and serviceable, solves the problem when it is desirable to keep cost down without a consequent sacrifice of quality. Being made of the best wood pulp board, it is as permanent as the walls themselves, and is in keeping with the finest school equipment. The writing surface of Slatoplate is hard and extremely close grained. It is prepared with coats of liquid slating compound hand rubbed to a smooth, uniform finish of perfect texture which rivals selected natural slate itself. Guaranteed for ten years, Slatoplate offers unusual service and economy.

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Manufacturers of Blackboards and School Equipment

Palmer's MULTI-SERVICE PRODUCTS

Vacuum Electric Blackboard Eraser Cleaner

A highly efficient, serviceable piece of equipment which should be in every modern school.

Cleans erasers thoroughly, quickly, and with little labor—at low cost of operation.

Has exclusive, individual features which make it **superior:**

Brush revolving at moderate speed, acts as a beater, dislodging crayon dust and cleans more thoroughly than stationary brush — yet, does not wear and tear eraser like rapidly rotating brush attached directly to motor shaft.

Indirect drive of brush prevents overloading motor.

Cleaning table level **is adjustable** to compensate for wear in brush—thus assuring utmost service from brush and making replacement infrequent.

Oil-less bearings are used, excepting in motor — and latter requires very little attention.

Bag of **generous size** and special vacuum cleaner material increases suction efficiency of cleaner.

OPERATES FROM ANY LIGHT SOCKET—
DEPENDABLE — GUARANTEED
OF GENUINE UTILITY — NOT A TOY

May be had with Chalk Tray Cleaning Attachment.

WRITE FOR DEMONSTRATION THROUGH NEARBY DEALER

Floor Brushes
Liquid Soaps
Soap Dispensers
Paper Fixtures
Erasers

PALMER CO.
Manufacturers for the Jobber
Milwaukee, U.S.A.

Dusters
Disinfectants
Cleaners
Floor Dressings
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SEE DEMONSTRATION AT BOOTH No. 14, N. E. A. CONVENTION, BOSTON.

NATIONAL DUSTLESS CRAYONS

are truly Crayons of Character

Free of grit from tip to tip NATIONAL CRAYONS respond perfectly to every stroke.

Being uniform in strength, every piece of NATIONAL CRAYON will withstand a firm grip of the fingers without danger of breaking or crumbling.

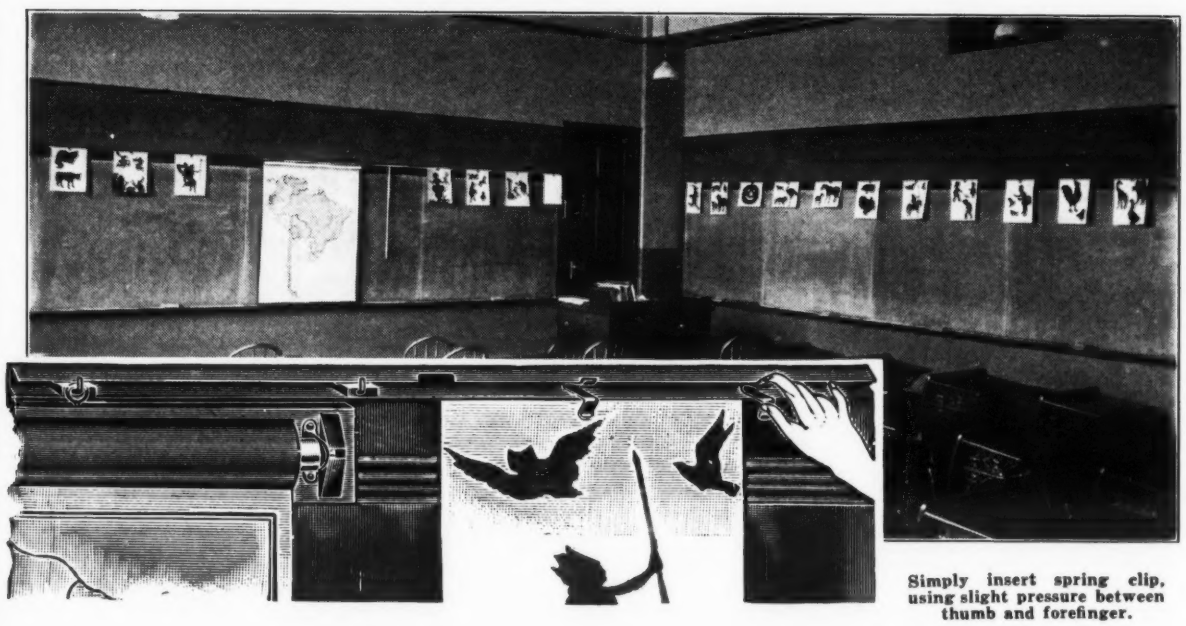
The dustless feature, combined with uniformity in all other respects, makes NATIONAL the ideal crayon for the classroom.

Your regular school supply dealer can serve you. If not, write direct.

THE NATIONAL CRAYON CO.
West Chester Pa.

makeshifts must go! the NEW DAY is here

The DAY ADJUSTABLE DISPLAY RACK is the modern means of hanging all maps, charts, posters, exhibits and other material.



Simply insert spring clip, using slight pressure between thumb and forefinger.

1. **Neat**—does away forever with unsightly nails and hooks—protects walls and moulding from holes and scratches—cannot mar exhibits.
2. **Simple** — easier than using a thumbtack — your thumb and forefinger do the trick in a second.
3. **Efficient**—holds firmly for a minute or a year. You can place exhibits on any wall as close or as far apart as you wish. Holds single flat sheets or heavy maps with equal ease.
4. **Safe**—you cannot pound, scratch or cut your fingers while hanging exhibits or maps, and no hooks or nails remain when exhibits are removed.
5. **Strong**—Scientifically designed to last a lifetime. Easily holds the heaviest maps—as many as you want.
6. **Low in Cost**—bought by the foot, there is no waste. Fasteners are inexpensive and do not wear out.

Working models of the Day Adjustable Display Rack will be sent to interested school executives and architects on request.

The Day Adjustable Display Rack consists of a single metal stamping attractively Lacquer finished. It is fastened to moulding or frame above the blackboard where it is out of the way and safe from damage. Fasteners are of two types —small spring clips for hanging flat sheets, and sturdy hooks of brass and steel for holding maps and other heavy objects. Either fastener may be fixed in place at any position along the rack or removed from place with one hand in a second. The Day Adjustable Display Rack is inconspicuous and blends perfectly with any moulding.

Architects are specifying the installation of Day Adjustable Display Racks in new schools. They realize the fallacy of providing neat attractive walls and mouldings only to have them disfigured through the use of nails, tacks, pins, screws and the other makeshifts so commonly used in the hanging of exhibits.

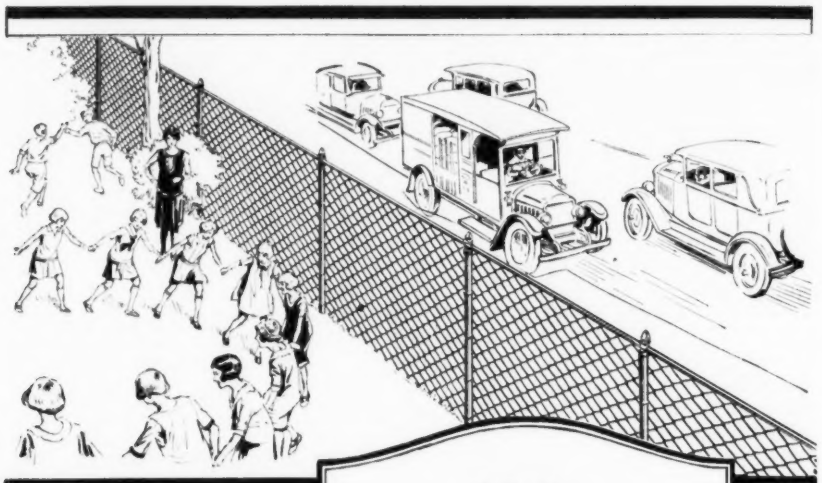
School Boards, too, are turning toward Day Adjustable Display Racks for the economical and practical solution of a perplexing problem.

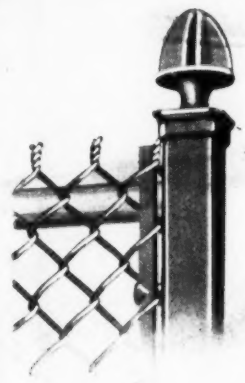
Building Superintendents and Janitors are pleased to discover that an entire room can be DAY equipped in surprisingly little time—and with no tools other than a hammer.

J. L. Hammett Company

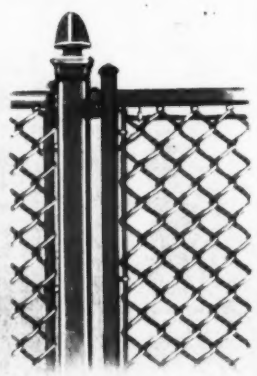
380 JELLIFF AVENUE
NEWARK, N. J.

KENDALL SQUARE
CAMBRIDGE, MASS.





The square, unclimbable Anchor terminal posts, with their graceful lines and attractive ornamental tops, contribute much to the beauty and strength of Anchor Fences.



The new Anchor Wire-weld Gate, because of its electrically welded construction and frame of square tubular steel, is the strongest and most attractive wire fence gate made.

Make play-time a safe-time!

Protect the children against traffic dangers. Keep them safe during the period of the day when danger lurks nearest—the play period.

An Anchor Playground Fence will keep the youngsters "within bounds." It will relieve the teachers of "guard duty"—permit them to give uninterrupted attention to play instruction.

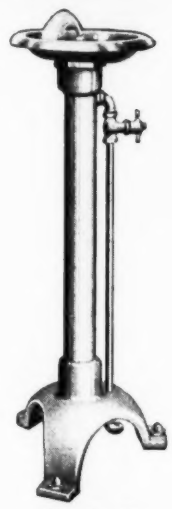
Anchor Fences are constructed and designed to give everlasting service with pleasing appearance. They are built with the strongest posts and gates made and are heavily galvanized. Their fine lines, graceful terminal posts, and new Wire-Weld Gates make them exceptionally attractive.

Anchor Sales and Erecting Service is nation-wide. A phone call, wire or letter puts it at your disposal.

ANCHOR POST FENCE CO.
Eastern Ave. & 35th St., Baltimore, Md.
Branch Offices and Sales Agents in Principal Cities

ANCHOR *Fences*

" BUY THE FENCE WITH THE *STRONGEST* POSTS"



"Sandow" Self-closing Fountain

"Mur-Made" all brass Wall Fountain

"Sampson" stop cock

"Simp-San" Bubbler Head

Showing how "Sampson" self-closing cock and "Simp-San" Bubbler Head may be used in combination.

Murdock Outdoor Bubble Font—Anti-freezing.

MURDOCK

Drinking Fountains and fixtures.

Built for hard service. Made principally of Bronze and Brass—practically unbreakable—therefore especially adapted for schools. In their use there is uninterrupted service and freedom from annoyance and repairs.

The Murdock Outdoor Bubble Font has solid bronze bowl and bubbler head, chromium plated. The inner works are entirely of brass. The construction permits removal of inner works without digging up. The Font is self-draining and anti-freezing. Angle stream is regular. 513 cities and towns have installed this Font in the past six years.

Write for booklet "What To Know About Outdoor Drinking Fountains"

THE MURDOCK MFG. & SUPPLY CO.
CINCINNATI, OHIO
Since 1853.

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HIGH GRADE

GYMNASIUM EQUIPMENT

ALSO

PLAYGROUND APPARATUS AND ATHLETIC SUPPLIES

(Send for Descriptive Catalog.)

CHICAGO GYMNASIUM EQUIPMENT COMPANY

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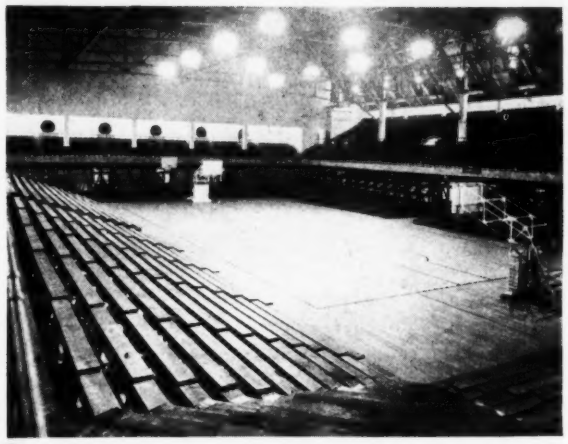


Note Mitred Corners
Every available inch is utilized

New men's gymnasium. An installation of Knockdown Bleachers at the University of Illinois

The LAST WORD in BASKET BALL SEATING

Shown above is an excellent example of complete space utilization. Every inch of space in this gym is turned into paying, comfortable and safe seats by the installation of Knockdowns. Note the mitered corners that allow the bleachers to use the corner space that is so often wasted.

A Few Inside Installations

Patten Gymnasium
Northwestern University

Newton High School
Newton, Kans.

Garrett High School
Garrett, Ind.

Fort Plains High School
Fort Plains, N. Y.

Belgrade High School
Belgrade, Mont.

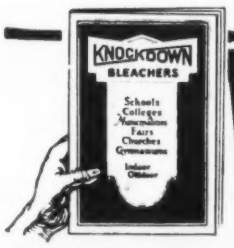
Inglewood High School
Los Angeles, Cal.

George Washington High School
Danville, Va.

KNOCKDOWN
TRADE MARK
Reg. U. S. Pat. Office
BLEACHERS

made only by

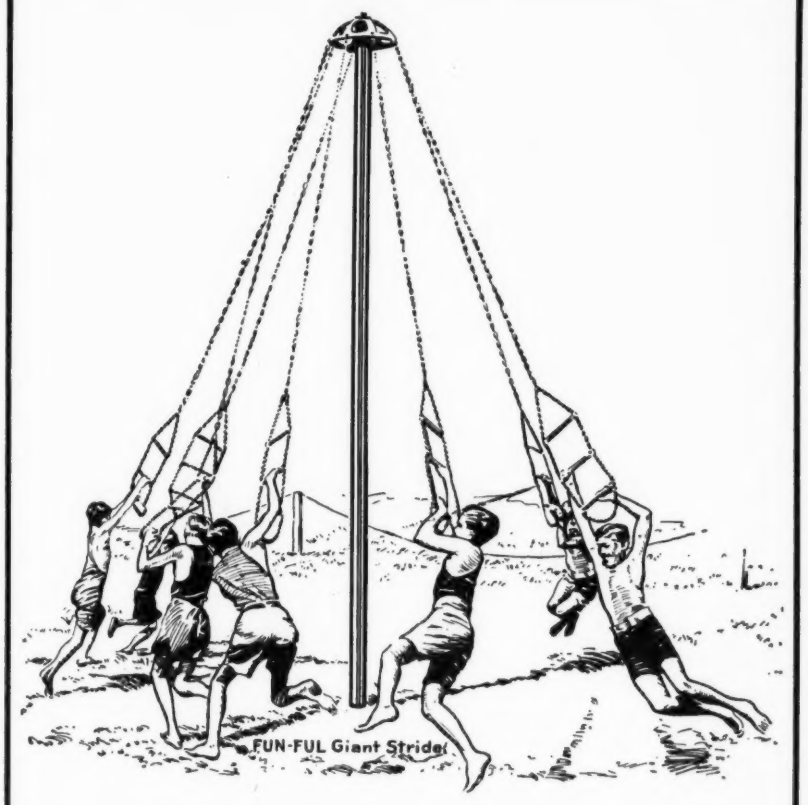
LEAVITT MFG. COMPANY
URBANA, ILLINOIS



LEAVITT MFG. CO.
Dept. S-1.
Urbana, Illinois
Please send me without obligation a copy of the Knockdown Bleacher Book.

*Name*_____

*Address*_____



THE FUN-FUL LINE
PLAYGROUND EQUIPMENT

FUN-FUL Playground Equipment is the result of experience, a quarter of a century devoted to the development and manufacture of children's outdoor health building goods by this company.

The best you can buy, this we guarantee.

We offer the most comprehensive line to select from, nothing but approved and guaranteed apparatus.

Also manufacturers of

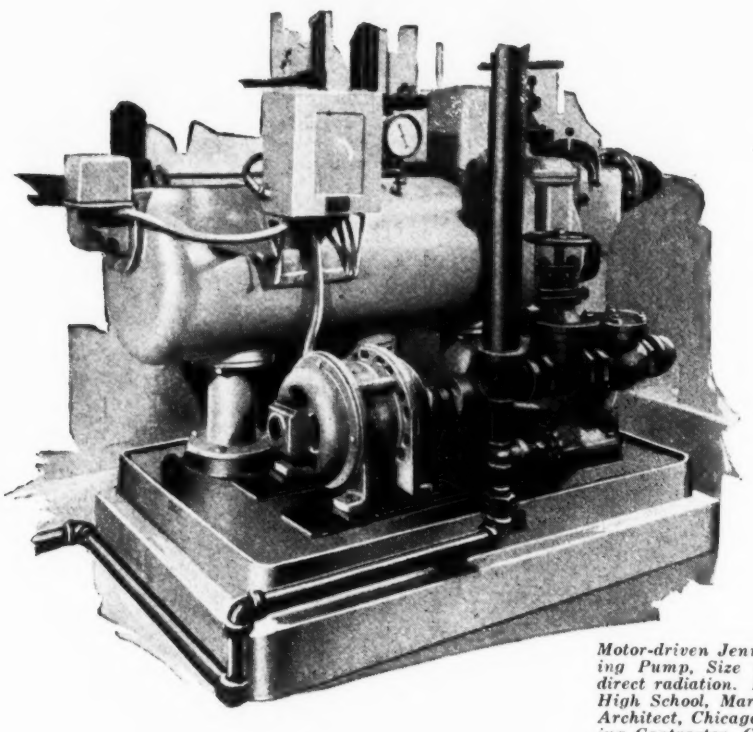
SWIMMING POOL
SPORTS APPARATUS

Water Slides	Aqua Planes
Marine Monsters	Pool Ladders
Balsa Wood Surf Boards	Diving Towers
Life Buoys	Water Ponies
Safety Pool Matting	Life Line Buoys
Landing Stairs	Depth Markers
Spring Boards	Life Lines, etc.

Largest manufacturers of playground and swimming pool equipment .

Awarded Gold Medal Brazilian Centennial 1922-1923

HILL-STANDARD CO.
EST. 1900
Anderson, Indiana, U.S.A.



Motor-driven Jennings Return Line Vacuum Heating Pump, Size E, for 65,000 sq. ft. equivalent direct radiation. Installed in the Marquette Senior High School, Marquette, Mich. Mr. John D. Chubb, Architect, Chicago, Ill.; Heating Service Co., Heating Contractor, Chicago, Ill.

for Marquette Senior High

For large school buildings like the new Marquette Senior High School, Marquette, Mich., the Jennings Heating Pump is a logical choice.

Its performance is unfailingly reliable season after season. There is no metal-to-metal contact inside the working parts that can cause wear and so result in a diminution in vacuum. The original high efficiency is always maintained.

Economy in operation is marked. Air is withdrawn from the return line of the vacuum heating system by means of one impeller element; water by another. The water is returned under pressure to the boiler. But the air is discharged without back pressure directly to the atmosphere. Since the air and water are handled independently, the saving in motor power is substantial.

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11 Wilson Road South Norwalk, Conn.

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Jennings Pumps

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School Board Journal
A Periodical of School Administration

Frank Bruce, Publisher
John J. Krill, Business Manager
Frank O. Dunning, Jr., Eastern Manager

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The World's Greatest Educational Gathering

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With this sort of an introductory paragraph, it will seem somewhat tame to come down to the schoolmaster's vocation and here attempt to point out the big thing. But the same spirit of enterprise which has characterized the industrial and commercial activities of the nation has found expression in its educational efforts.

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The banner meeting of the year which brings together the great educators of the country in a professional conference is the one staged by the Department of Superintendence of the National Education Association. This distinguished body, with its thousands of leaders and workers, will meet this year at Boston, February 25 to March 1, 1928.

The event stands out as the most important of the year in the field of popular education; not only because it assembles the great educators of the land, but because these in their collective capacity concern themselves with the things that are vital to the cause of citizenship training in a great nation. They go to the heart and soul of the problem of popular education, and thus render a noteworthy service to the great American Republic. THE EDITOR.

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A Memorable Meeting!

The Value of the Budget in the Schools of Hamtramck, Michigan

Joseph J. D. Zwonkiewicz, Treasurer, Board of Education, Hamtramck, Mich.

In the public schools the budget is a means to an end. It is not an end in itself. The budget is a safeguard within the school system itself, for once adopted, the source of income becomes fixed and amounts may not be spent in excess of those allowed. The budget is a protection to the public. It is developed scientifically in terms of the educational policies of the board of education, and it stipulates how the public money shall be spent.

Mr. Joseph J. D. Zwonkiewicz, treasurer of the Hamtramck, Mich., board of education, writing in the *Hamtramck Public School Bulletin*, discusses the organization and administration of the budget and the educational results which may be expected as a result. He writes:

Public schools spend public money. Buildings must be provided. They must be kept in good repair. They must be adequately cleaned. They must be properly heated and ventilated. The children must be provided with efficient teaching service. Supplies meeting the instructional needs must be purchased. Medical and dental attention is included as a basis of the health program. Libraries will also form a part of the educational service.

Public schools from time to time will demand capital outlay for new buildings and new equipment caused by growth in the number of children in the city.

Public schools also must maintain a debt service which consists of repaying partially over a period of years the cost of new buildings and sites which were not paid for in full at the time of erection or purchase.

Public schools receive their income from one primary source—public taxes. These taxes may divide themselves into several secondary sources such as the amount received from the state by means of the primary fund or the amount received from the city itself through local taxes.

Federal aid is granted under the Smith-Hughes act as assistance in conducting trade and vocational classes where the course of study is that prescribed by the federal and state department of education. The teachers of these subjects must meet special qualifications.

The state primary fund is paid on a per-capita basis from census figures secured by the local child-accounting department. This year the amount is $12.85 per child for the 20,220 names on the Hamtramck school census. This means approximately $260,000 this year. Primary money can be used only for teachers' salaries. These two items, federal and state aid, are subtracted from the total financial needs of the system in order to determine the local school-tax levy.

Local taxes constitute the third portion of income and this is by far the largest and most important source.

Just what is the process of obtaining this local tax money? By law, the board of education is required to send to the assessor of the city of Hamtramck in the month of July the amount that it will need for school purposes during the forthcoming fiscal year. In Hamtramck this fiscal year extends from July 1 to June 30. School taxes are collected in January of each year. School taxes are spread on the various taxrolls in October and November of each year. The amount to be spread against the various pieces of property in the city has to be determined by the city assessor after he is notified of the entire amount that needs to be raised for that year.

Public schools determine what money will be needed by means of the annual school budget. The budget is an assurance to the public that economy and efficiency will be exercised in the spending of the public funds.

In the first place the board of education adopts the educational policies for the school district. The carrying out of these policies is an executive function delegated to the superintendent of schools. The superintendent is directly responsible to the board of education for putting the means of procedure under these policies into effect. A course of study is developed by the executive staff and approved by the board of education. This course of study is translated into money costs by the executive staff after a complete analysis is made of the child-accounting figures. The number of teachers to be hired and the amount of supplies to be purchased is based on the probable attendance of children in the schools.

These money requirements become the preliminary budget for the ensuing year. In addition to translating the course of study into money costs, there must be an analysis of capital outlay due to the growth of child population. Here again the child-accounting department furnishes the figures.

The cost of the proposed capital outlay goes into the preliminary budget. This preliminary budget is then reviewed by the executive council and the various items therein appraised and rated according to their exact need in terms of the policy of the board of education. After this preliminary appraisal, the final budget can be developed. From this the total amount of money for the year is ascertained.

The budget is then presented to the board of education for approval. Once adopted the city assessor is notified of the portion of the budget that must come from local taxes. He must spread this amount on the tax rolls. From this time on the income for the fiscal year is absolutely fixed. It cannot become greater. Through delinquent taxes it may and often does become less. Therefore the budget shows the maximum amount that can be used for any purpose. The budget cannot be overdrawn. There will be no money to meet the expense. The budget compels a complete adherence to adopted board policies as translated into the course of study. Exact anticipation of needs must be made. The budget becomes the great guiding financial light of the school year.

The budget is simply a scientific means of spending public money in an economical manner. For every dollar placed in the budget, certain educational results are secured. The board of education receives a report monthly on the amount of money spent and the instructional progress of the system during that period. There must be a close correlation between the two. The budget is a means to an end. Instruction of the individual child is that end.

Atlanta Uses Novel Plan to Review Standardized Plans for Elementary Schools

H. Reid Hunter, Assistant Superintendent, Atlanta Public Schools

Boards of education throughout the country will be interested in the recommendations of a committee from the National Association of Building Owners and Managers, which met in Atlanta, October 7 and 8, and reviewed plans for an elementary school, the first school building to be built from a $3,500,000 bond issue.

The committee which was invited to Atlanta by the board of education and the bond commission was composed of the following: E. H. Brenner, Omaha; W. J. Aring, Cleveland; J. B. Lear, Philadelphia; J. F. Cook, St. Louis; L. B. Emerling, Chicago; and W. E. Malm, Cleveland. A number of local building managers were present at the different sessions. Mr. G. Lloyd Preacher, school architect for Atlanta, Mr. R. R. Ritchie, superintendent in charge of business affairs, and Supt. Willis A. Sutton represented the local school system.

The committee reviewed in considerable detail the general plan of the building, the specifications for heating, ventilating, the plumbing, lighting, arrangement of special rooms, and other service features of the building. The committee also considered the cost of construction and operation. A stenographer was present and recorded the discussions in order that the local school authorities might have the benefit of the suggestions made. At the final session each member of the committee made a summary of his recommendations. There was considerable variation in the opinions expressed by individual members of the committee. This was to be expected as the committee had never sat as a unified committee before, and several had had no experience in school planning or the operation of school plants. Their experience had been mostly with office buildings. No very radical changes were recommended but many suggestions were made which will make it possible to operate and maintain the Atlanta school plants more economically.

Some of the suggestions should meet the approval of experienced school architects or school superintendents who are planning buildings for a modern school system. Many of the recommendations show influence of corporate interest.

The following recommendations were made by one or more members of the committee:

1. Build 1928 models of school buildings instead of 1915. (Atlanta plans call for 1928 models.)
2. Double-hung wooden windows. (Plans call for Austral type.)
3. Twenty-year roof—Barrett specifications.
4. Ten-year roof.
5. Copper flashings and down spouts.
6. Terrazzo floors in corridors—with brass strips at intervals of eight feet.
7. T-shape buildings. (Atlanta plans called for L or H type.)
8. Auditorium to be built to make it possible to separate it from other parts of building, when the school plant is used for community meetings.
9. Provide adequate restrooms for principal and teachers. Special room for school physician and nurse.
10. Direct steam radiation preferred, with unit heaters in basement rooms.
11. Eliminate balcony in auditorium.

The following recommendations met with much opposition from the Atlanta school architect and from school administrative officers:

1. Provide for fundamentals only. Eliminate special room for "fads and frills."
2. Put money in standard classrooms and eliminate cafeterias, gymnasiums, and auditoriums, shower baths, etc.
3. Corridors 8 ft. wide.
4. Size of classrooms 29 by 22 by 11 ft.
5. Place toilets in basements and in dark spaces at the turn of the building.
6. Eliminate all shower baths.

Members of the reviewing committee expressed gratification in the businesslike way and

(Concluded on Page 145)

State School Funds and Their Apportionment*

Fletcher Harper Swift, Professor of Education, University of California

1. THE MARYLAND PLAN

Schools in America began as local institutions. In the early colonial laws, such as the Massachusetts laws of 1642 and 1647, and the Connecticut law of 1650, the voice of the state is that of the supreme authority ordering its subordinate and constituent units to provide certain educational facilities, but the final responsibility for provision was placed upon the local units.

The Connecticut code of 1700, modified in 1754, which continued in force until 1798, compelled all towns to levy a local tax of at least forty shillings on each thousand pounds. The burden of school taxation in Connecticut proved to be so great that the establishment in 1795 of what was regarded as a vast state endowment for public schools was haled as a salvator.

Perhaps almost from the first, the purpose in the minds of the directors of school policy in Connecticut was that the revenue of the permanent school fund should pay in full the wages of common-school teachers and relieve the towns and school societies from the necessity of levying any local taxes. The act which established the Connecticut school fund and subsequent acts relating to its management show this in several ways: (1) by the absence of any provision requiring state or local taxation for schools; (2) by refraining from stating any conditions which must be fulfilled by local school corporations in order to share in the revenue; (3) by specific provision in 1801 that school societies which had expended all public monies for teachers' wages might be considered to have fulfilled all necessary conditions, even though some of the districts under their jurisdiction had conducted no school during the year.

The Connecticut school fund began to contribute revenue for the support of the public schools in 1799. The gradual increase of its income was accompanied by an increase in disinclination to levy local taxes. From 1821 to 1854 a town or society school tax was virtually unknown in Connecticut. The only sources of school support were rate bills, gifts, and the income of permanent funds. Under this system of support the Connecticut school system declined so rapidly as to be pointed out as a warning.

The Establishment of the District System

The lesson which Connecticut had learned at such a cost was not lost upon other states. The belief that the salvation of the schools depends upon local rather than upon state effort, support, direction, and control, became a part of the national educational creed. Under the influence of this creed arose and flourished the district system.

Massachusetts was one of the first states to legalize, experiment with, and finally to abolish, the district system. But those sons and daughters of Massachusetts who migrated to the west and became the pioneers in the new and unexplored wilderness, planted there the district system. The evils of this system and the impossibility of maintaining efficient schools under it have been pointed out by every farseeing educational leader from the days of Horace Mann to the present time. But despite the irrefutable evidence presented against it, this system still continues to be one of the most widely found in the United States today.

During the past ten years, vigorous attacks have been leveled against it. The disastrous and ominous inequalities universally and inevitably produced thereby have been pointed out by multitudes of studies, surveys, and reports. Gradually the public mind has awakened to the necessity of relieving these thousands of local school corporations of an increasingly larger share of the burdens of school support. This awakening has resulted in the attempt to provide from the state treasury vastly larger funds, and to distribute these funds by methods which take into consideration the wide differences in the ability of school districts, towns, cities, and counties to provide school revenues.

The State Equalization Funds

A study based upon the legislation enforced in 1926 showed that no less than 24 states had provided what are commonly called state equalization funds. One of the outstanding features of the acts passed by the various legislatures of that year and the subsequent year, 1927, is the widespread movement to increase equalization funds already established, or, in the case of states not yet having such funds, to establish them. Many of the state funds which up to the present time have been created as equalization funds, are disbursed by methods which fail to bring about equalization in any complete or thoroughgoing sense. It is the writer's intention to present in a series of articles, an account of the plans of state school support in a number of states whose policies are worthy of the thoughtful consideration of students of public-school finance.

It is deemed fitting to present as the first plan to be treated in this series that of the State of Maryland. Those who have followed the progressive tendencies in state plans for financing public schools will appreciate the reason for this choice. Maryland was one of the first states to work out a plan for the provision and distribution of an equalization fund which provides for grants from the state which are directly proportioned to the need and economic ability of the local school unit. This and other features which make the Maryland plan unusually significant will appear in the paragraphs which follow.

Unique features of Maryland system. Maryland enjoys the unique distinction of being one of the few states in the Union which has worked out a scheme of financing public schools, which, in a sound and relatively satisfactory way, equalizes school burdens, revenues, and consequently educational opportunities. It will be helpful to summarize at the outset the outstanding features of the Maryland system of school support. These include the following: (1) the organization of the school system on the basis of the county unit; (2) requiring from every county the submission of a budget showing the cost of providing a minimum school program; (3) an assured fund from state and county sources sufficient to meet the costs submitted by the county and approved by state authorities; (4) a state minimum-salary scale graduated to professional qualifications of teachers; (5) liberal state appropriations available to all counties regardless of wealth; (6) the apportionment of the major portion of state funds upon the basis of school census and aggregate attendance; (7) provision of a state equalization fund available to every county which levies a county school tax of a minimum rate fixed by law (6.7 mills) and is unable to finance from all other state and county funds its minimum state-approved program; (8) the computation of the total county school budget on the theory that teachers' wages should constitute 76 per cent of the total current costs. Detailed consideration will be given to each of these features in subsequent paragraphs.

State School Funds

The laws of Maryland in force prior to 1927 provided for two state public school funds: (1) the general state school fund, composed of the proceeds of the state school tax and a long list of annual appropriations, and (2) a permanent common school fund known as the state free school fund. By an act passed in 1927, which will be analyzed later, Maryland abolished her state free school fund and provided that the moneys belonging to this fund should be distributed among the counties of the state and the city of Baltimore. However, the state school monies provided up to and including the year 1926, include the income of the state permanent free school fund, which must therefore be described in the present account.

Free school fund.—In the year 1926, two permanent funds were reported by the state controller as follows: the free school fund, amounting to $231,818.00 and yielding an income of $9,534.52, and the free school sundry counties fund amounting to $170,328.95 and yielding an income of $44,533.16. The combined investments of these two funds amounted to $402,146.95.

The free school fund owes its origin to a law passed in 1813, which set aside the proceeds of a state bank tax in part as fund to be distributed among the several counties of the state. The Constitution of Maryland, article 8, section 3, provides that the school fund of the state shall be kept inviolate and appropriated only to the purposes of education. Formerly, the laws provided that the income of this fund should be apportioned among the counties of the state and the city of Baltimore upon a basis of school census.

The more recent school codes, however, contain no act providing a method for apportioning the income of this fund. It would appear therefore that such income has been returned to the counties in proportion to their claims against the investments constituting the fund or has been added to the state general school fund without any attempt to separate this very small revenue from that provided by other state sources.

An act approved April 26, 1927, directs the state board of public works to sell the securities held in trust by the state of Maryland and to distribute the proceeds of such sales to the city of Baltimore and to the counties of the state in proportion to the credits to which each is entitled, on the basis of the shares of the free school fund belonging to the same. The act indicates the credits to which the city of Baltimore and each of the counties of Maryland are severally entitled, and which total $403,874.45, a sum slightly in excess of the total investments credited to the common free school fund and the free school sundry county fund in the report of the controller for the year 1926. The amounts to be thus distributed under the act of 1927 vary from $66,727.29, credited to the city of Baltimore, to $4,766.23, credited to Charles County and to Garret County respectively.

The act provides that the funds thus distributed shall be used solely for the purchase of school lots or for the erection or equipment of schoolhouses.[3]

General state school fund. The general state school fund is composed of the proceeds of the state school tax and of appropriations provided for the state department of education, the state board of education, any departments or officials under the jurisdiction of the same; four state normal schools; teachers' pensions; county school officials; and all appropriations from

*This is the first of a series of articles on state school funds by Professor Swift. The second will appear in the March issue of the JOURNAL.

[1]Maryland State Controller, *Annual Report*, 1926, p. 20.

[2]*Public-School Laws of Maryland*, 1892, p. 28, secs. 101 and 102; F. H. Swift, *A History of Public Permanent Common-School Funds in the United States*, p. 297.

[3]Laws of Maryland, 1927, pp. 864-866, ch. 453.

which monies shall be expended directly for the benefit of public schools.

The total of the appropriations provided in 1926 for the state general school fund amounted to $3,812,600. Deducting from this total $4,000 appropriated for extension teaching and $347,600 appropriated for four state normal schools, there remains as the total amount appropriated for the benefit of public schools $3,461,000.

This amount was met in part by the proceeds of normal-school fees, estimated as aggregating $70,000. Deducting this latter sum from $3,461,000, there remains as the amount to be met from the state general funds and the state public-school tax, $3,391,000. Of this total of $3,391,000, approximately 70 per cent (69.7 per cent) or $2,362,500, was derived from the state general property school tax, leaving approximately 30 per cent (30.3 per cent) or $1,028,500, to be paid from the state general fund.[4]

State Taxes as Sources of School Revenue

General property tax. The law provides for levying annually a state general property school tax of fifteen cents on each $100 of "taxable property."[5] The proceeds of the state school tax as already indicated are credited to the general state school fund. In actual practice, the rate provided by the law just cited is not levied. Each successive legislature enacts a law which first repeals the rates of state taxes to be levied for various projects in accordance with the provisions of the *annotated code of Maryland*, article 81, and amendments thereto, and, then, provides new rates for each state project to be financed, in part at least, from the proceeds of a state general property tax. The state tax rates provided by the legislature to be levied for public schools (number of cents on each $100 of assessable property) from 1923 to 1929 were as follows:[6] 1923, 10.95; 1924, 8.9; 1925, 12.15; 1926, 12.105; 1927, 11.25; 1928, 10.64; 1929, 10.38.

Corporation, inheritance, and license taxes. As indicated in a preceding paragraph, in 1926, 30.3 per cent of that portion of the general state school fund benefiting public schools was derived from the state general fund. In this year, 24.01 per cent of the state general fund was derived from the proceeds of corporation taxes, 9.46 per cent from the proceeds of inheritance taxes, and 9.15 per cent from the proceeds of miscellaneous license taxes and fees, making a total of 42.62 per cent derived from these three classes of taxes.[7]

Apportionment of State School Funds[8]

The composite nature of the general state school fund precludes the possibility of distributing it by any general method. Each of the laws providing the several legislative appropriations of which the fund is composed, sets forth the method by which the said appropriation shall be apportioned. It follows that any account of the apportionment of the general state school fund must reveal the method by which each separate constituent appropriation is apportioned. This is done in Table I, which shows for the year 1926 the various appropriations constituting the general state school fund, the amount of each, the per cent of the total ($3,461,000) each constituted, and the basis provided by law for its apportionment.

A study of the data presented in Table I will reveal that 64.21 per cent of the 1926 appropriations constituting the general state school fund, were apportioned on some per-pupil basis, namely, school census, attendance, or enrollment.[9] State appropriations for the salaries of high-school teachers and county colored teachers of industrial subjects are apportioned on a per-teacher basis, but no state grant will be made for the salary of a colored industrial teacher unless the school in which such teacher is employed maintained during the preceding year an average daily attendance of at least thirty pupils, and the number of high-school teachers for whom the state will pay salary reimbursements depends upon the enrollment and the average daily attendance of the school employing the same.

From these and similar considerations which might be made on the basis of Table I, is evident the desirability of a further analysis such as is presented in Table II, and which shows to what extent each distinctive type of basis is employed in the apportionment of state school appropriations.

The data presented in Table I and Table II show that Maryland apportions the majority of her school appropriations among all local school corporations (counties) on bases which entirely disregard differences in wealth, or in effort as represented by local tax rate. Every county in the state benefits by each appropriation included in the general state school fund, except the equalization fund, and this fund constitutes only 11.59 per cent of the total state appropriations for the public-school system.

A considerable portion of the monies provided are apportioned in the form of flat quotas to aid in the payment of the salaries of high-school teachers and county school officers. Other salary grants are graduated, but upon arbitrary bases. The major portion (two thirds) of the largest single appropriation (for census and attendance) is apportioned among the counties upon one of the most antiquated and confessedly unsatisfactory bases employed in the United States today, namely, attendance.

The Equalization Fund

Origin. Before entering upon an account of the methods by which the equalization fund is provided and apportioned, it will be well to recount briefly the events which led to the establishment of this fund in 1922, as set forth by the state superintendent of education in a recently issued statement.[10]

The state school program of 1922 was the

TABLE I. Classification and Analysis of Maryland State Appropriations for Public Schools, 1926.

Purpose	Amount[1]	Per cent of total[2]	Basis of Apportionment[3]
Group I—89.74 per cent[4]			
For services and materials furnished immediately to pupils and schools.			
1. Census and attendance grants	$1,970,000	56.92	**Per pupil:** ⅔ census; ⅓ aggregate attendance.
2. High school salaries (principals and teachers)	439,045	12.69	**Per teacher** (including principal): number of teachers allowed based on enrollment and average daily attendance.
3. Equalization fund	401,055	11.59	**Need:** graduated grants to cover allowed costs not met by all other funds.
4. Free textbooks	200,000	5.78	**Per pupil,** average enrollment.
5. Materials of instruction	50,000	1.44	**Per pupil,** average enrollment.
6. County colored industrial schools ($750 for school, $750 for teacher's salary)	30,750	0.89	**Per school,** one half; **per teacher,** one half.
7. Vocational education	15,000	0.43	Bases determined by Federal Smith-Hughes Act, and Federal Board for Vocational Education.
Group II—2.31 per cent[4]			
Pensions for retired teachers	80,000	2.31	Grants graduated according to pension of individual teacher and state's obligation thereto.
Group III—5.08 per cent[4]			
County school officials (superintendent, attendance officer, supervisors and helping teacher)	176,000	5.08	**Per officer:** attendance officer, full salary up to $1,200. All others, ⅔ of salary; graduated grants depending upon years of experience (and for superintendents, number of teachers in county).
Group IV—2.87 per cent[4]			
State board of education, and departments, bureaus and officials subject to state board.			
1. State board of education (hotel and travel)	1,000	0.03	Fixed grant.
2. State department of education	65,650	1.89	**Itemized budget,** for which separate appropriation is made.
3. Physical health and education	12,500	0.36	Fixed grant.
4. Bureau of educational measurements	12,000	0.35	Fixed grant.
5. Bureau of publications	4,000	0.12	Fixed grant.
6. Printing annual report	2,000	0.06	Fixed grant.
7. Consultant architect	1,500	0.05	Fixed grant.
8. Teachers' examination and certification	500	0.01	**Per teacher:** sufficient to meet state's obligation.
Total	$3,461,000	100	

[1]Amounts taken from mimeographed statement furnished by State Superintendent of Schools.*
[2]Computed.
[3]Based upon *Maryland Public-School Laws,* 1927.
[4]Total per cent of appropriations included in this group. For detailed analysis, see column 3.
*(Note "1" continued) excluding $4,000 appropriated for extension teaching and $347,600 appropriated for four normal schools.

TABLE II. Bases of Maryland State Grants for Public Schools, 1927

(Based upon *Maryland Public-School Laws,* 1927.)

I. Pupil grants.
  1. School census (6-14 years).
     Two thirds of census and attendance appropriation.
  2. Aggregate attendance.
     One third of census and attendance appropriation.
  3. Average daily attendance.
     Determines (together with enrollment) the number of teachers for whom state will allow salary grants: (1) high-school teachers, (2) county colored industrial-school teachers.
  4. Enrollment.
     (1) Together with average daily attendance, determines the number of high-school teachers for whom state will allow salary grants.
     (2) Average enrollment, free textbook appropriation.
     (3) Average enrollment, materials of instruction appropriation.

II. School official grants for salaries excluding state).[1]
  1. Flat quotas (not graduated).
     (1) County attendance officer, full salary up to $1,200.[2]
     (2) County colored supervisor of industrial work in colored schools, $750.
     (3) High-school principal, $900.
  2. Grants graduated.
     (1) County school officials, two thirds of salary.
        1—Superintendent.
        Grants graduated to salaries paid, which vary from $2,500 to $4,140 depending upon superintendent's years of service and amount of responsibility as measured by number of teachers in county.[2]
        2—Supervising teachers.
        Grants graduated to salaries paid, which vary from $2,040 to $2,640 depending upon number of years of service in Maryland as supervisors.[2]
        3—Helping teachers.
        Grants graduated as for supervising teachers, but corresponding salaries are $600 less at each salary level.

[1]Grants for salaries and expenses of state school officials are included under V.
[2]Local school corporations may pay salaries in excess of this maximum, but no state reimbursement will be granted for such excess.

     (2) High-school teachers.
     Grants graduated from $600 to $150, depending upon number of teachers eligible. Number eligible depends upon enrollment and average daily attendance. State grant per teacher decreases as number increases.
     (3) Vocational education.
     Fixed amount to match Federal Smith-Hughes subvention. For salaries and training of supervisors and teachers of vocational subjects in secondary schools.
     (4) Retired teachers.
     Pension grants graduated according to pension of individual teacher and state's obligation thereto.

III. School grants. Fixed grants per school.
  1. County colored industrial school.
     $750 for school, and $750 for teacher if allowed.
  2. Library grant.
     $10 to any schoolhouse district which provides the same amount.

IV. County equalization grants.
  Graduated grants based upon county's economic need. Sufficient to cover all costs in approved budget not met by all other state and county funds.

V. Grants to state board of education, and departments, bureaus and officials subject to it. Fixed amounts determined by the legislature.
  1. State board of education (for hotel and travel expenses).
  2. State department of education.
  3. Physical health and education.
  4. Bureau of educational measurements.
  5. Bureau of publications.
  6. Printing annual report.
  7. Consultant architect.
  8. Teachers' examination and certification.

[4]Amounts taken from mimeographed report furnished to the writer by the State Superintendent of Public Education. Cf. *laws of Maryland,* 1924, pp. 466 and 484, ch. 176. Per cent computed.
[5]*Maryland Public School Laws,* 1927, p. 114, sec. 205.
[6]*Laws of Maryland,* 1922, pp. 1106 and 1108, ch. 489; *ibid.,* 1924, p. 1434, ch. 572; *ibid.,* 1927, p. 1555, ch. 688.
[7]Based upon an analysis of data presented in Controller of the Treasury of Maryland, *Report,* fiscal year 1926, p. 11.
[8]The account already given of the free school funds makes evident the reasons for not presenting any further statement concerning the method of apportioning the income of this fund.
[9]As follows: Census and attendance appropriation, 56.92 per cent; free textbooks, 5.98 per cent; materials of instruction, 1.44 per cent.
[10]Condensed from mimeographed statement furnished to the author by the Maryland state superintendent of education.

result of a careful study of the local needs throughout the state. As is usually the case with school programs, most of the items which were found to need improvement called for additional funds, either state or local. A study of school data from every county in the state revealed that the poorer counties had higher tax rates and less well-trained teachers than the wealthier counties. Again, the wealthier counties had three or four times as much wealth back of each child to be educated as the poorer, but in the distribution of the state school fund on the basis of school census and aggregate days of attendance, a wealthier county frequently received as much money for each school child as a poor county.

If the state appropriation were to be increased sufficiently to enable the poorer counties to carry out the new state program on a reasonable local tax rate, an increase of more than $2,000,000 in the state appropriation would be required. It was recognized that this increase was more than could be secured. Consequently, the equalization-fund plan was adopted as a means of aiding the poorer counties to carry out the new program.

The principle underlying this fund was stated to the people of the state in the following words: "Any county that cannot carry the new minimum-salary schedule for teachers on a county school-tax levy of 67 cents on each $100 of assessed valuation, shall have such an allotment from the equalization fund as will enable the county to carry out the program; provided, that not less than 24 per cent of the current expense budget must be spent for purposes other than teachers' salaries."

It was found that 15 of the 23 counties would share in the new equalization fund, in amounts ranging from $1,000 to $35,000 for the year 1923, and that the equalization fund required for the fifteen counties would amount to $234,000. Instead of increasing the state school fund by $2,000,000 and distributing it on a pupil basis, an equalization fund of $234,000 was provided with a view to helping the most needy communities, in direct proportion to their school needs. The equalization fund is calculated from data furnished by each county superintendent of schools, who is the secretary of the county board of education.

Calculation of fund. The following facts are submitted by each county superintendent for every teacher employed in his county: (1) school, (2) name of teacher, (3) years of experience, (4) grade of certificate, (5) salary, and (6) change in salary due to (*a*) raising grade certificate of teacher employed, or (*b*) replacing present teacher with another having additional training.

The facts presented by each county superintendent are reviewed by the state central authority. Additions to the budget are made for the salaries of new teachers to provide for cases where the number is insufficient, or where there is an increasing population for which new buildings are being provided.

The law provides that "counties sharing in the equalization fund shall expend no less than 24 per cent of the total budget, not including debt service and capital outlay, for purposes other than teachers' salaries." By implication, 76 per cent of the total budget of such counties shall be spent for teachers' salaries. In compliance with this implied provision, the total county school budget is determined by dividing the total state-approved county teachers' salary budget by .76.

The equalization fund to which any county is eligible is the difference between the quotient thus determined, which represents the estimated amount required to maintain the schools of the county, and the sum of the proceeds to be received by the county from all state appropriations other than the equalization fund.

TABLE III. The Maryland Method of Determining a County's Share of the State Equalization Fund Estimate for Worcester County, 1924-25[1]

I. Estimate of total current school costs for next year. Rule: Divide total state approved salary cost by .76.			
1. Estimate of next year's salary cost.			
(1) Last year's total teachers'[2] payroll			$149,340
(2) Total deductions for excess in number of teachers[2] or in salaries[3]	$12,800		
(3) Total increases for better qualified or additional teachers[2]	9,460		
(4) Net deductions			3,340
(5) Total state approved salary budget for next year not including transportation costs			146,000
2. Estimated state approved total current costs for next year (item 5 divided by .76)			192,100
(6) One half the cost of transportation of elementary pupils (arbitrarily added)[4]			3,046.46
(7) Total state approved budget for all current costs for next year			195,146.46
II. Estimate of amount due county from equalization fund. Rule: From cost of total state approved budget, subtract sum of proceeds of county 6.7 mill tax and all state appropriations.[5-6]			
1. State grants made to county prior to grant from equalization fund. From appropriation for:			
(8) Census and attendance	$37,226.20		
(9) High schools (½ salary costs)	17,190		
(10) Textbooks	4,171.32		
(11) Materials of instruction	1,042		
(12) County colored industrial schools	1,500		
(13) ⅔ salary of county school superintendent	1,960		
(14) ⅔ salary of county school supervisor	1,560		
(15) Salary of county attendance officer	1,200		
(16) Total state grants[5]		$ 65,850.36	
2. Proceeds of county tax.			
(17) 6.7 mill tax on county's assessed valuation		111,000	
3. (18) Total receipts available to county from all county and state funds except equalization fund			176,850.36
4. (19) Amount due from county equalization fund[7]			$ 18,296.10

[1]Based upon mimeographed statement furnished by Maryland State Superintendent of Education.

[2]All principals and teachers, elementary and high school, white and colored.

[3]As explained in text, state provides definite salary schedule indicating maximum salary state will approve for school officials of specified qualifications. State law also indicates number of teachers allowed on basis of number of pupils.

[4]Not provided in law.

[5]Obviously not including the state equalization fund.

[6]This process may be expressed by the following formula: Amount due county from equalization is Item 7 minus (Item 16 plus Item 17).

[7]County's quota is Item 7 minus Item 18.

As already noted, every county in the state receives monies from every state appropriation for public schools included in the general state school fund, except that provided for the equalization fund. State laws provide definite and separate salary scales for county school officers, white elementary-school teachers, white high-school teachers, and colored teachers. In each case, the salaries vary with the professional qualifications of the teacher or other school official employed. Counties may pay salaries in excess of the minimum provided by law, but will receive no state reimbursement for such excess.

The law further limits state reimbursements on the basis of the number of teachers which will be approved, as already noted in Table II. Before the budget of any county to be used as a basis for an apportionment from the state equalization fund is approved, there must be deducted any excesses due to the employment of teachers in excess of the number allowed, or due to excesses in salaries paid.

Just how Maryland determines and apportions her equalization fund can be most clearly shown by presenting the steps involved in calculating the amount due to some one county from the equalization fund. Table III shows how the quota for Worcester county was calculated for the year 1924-25.

Effects of equalization fund. The amount of the equalization fund each county will receive is calculated every two years and included in the state school budget, subject to approval by the state legislature.[11] This policy results in a biennial readjustment of state aid in proportion to the increasing or decreasing need of each county. The benefits resulting from the equalization fund have been summarized by the state superintendent of education as follows:

(1) The equalization fund enables every county to pay the state minimum salaries provided it levies a reasonable county school tax. It does this without forbidding a county to pay more than this minimum if it so desires by levying a tax above the required rate.

(2) Counties sharing in the equalization fund can secure as many trained teachers as are available, and need not increase the local county school-tax rate in order to meet the increased cost of these better.

(3) A minimum school year for white schools of 180 days is secured without hardship to the poorer communities; and since teachers' salaries are on a year basis, payable in ten monthly installments, many counties have a school year of 190 days or more without any additional cost to the taxpayers.

(4) A poor county shares in the equalization fund in direct proportion to the increases in training and efficiency of the teachers employed, and the increase in the high-school facilities and other educational opportunities for the children, because the cost of teachers' salaries in all schools is the main factor in determining each county's share.

(5) The equalization fund has made it possible to secure a total salary increase for well-trained teachers, ranging from $150 to $700 per teacher and totaling almost half a million dollars. Salary increases for teachers were accompanied by salary increases for county superintendents, county supervisors, and helping

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[11]Based upon mimeographed statement furnished by the Maryland State Superintendent of Education.

TABLE IV. Maryland State Equalization Fund Results, 1926 Comparison of Need With Per Cent of School Burden Provided by State[1]

Counties	Need: Wealth per Teacher in Thousands of Dollars (1924)[2] Am't	Rank[3]	Per Cent of 1926 Current Expenses Paid from State and Vocational Funds: Excluding Equalization Fund %	Rank[4]	From Equalization Fund %	Rank[5]	Including Equalization Fund %	Rank[4]	Effect of Equalization Fund
Calvert	68	1	34.7	2	26.8	2	61.5	1	Good
Worcester	102	6	31.0	5	11.4	8	42.4	8	Bad
Caroline	103	7	28.4	13	13.2	7	41.6	9	Good
Prince George's	126	11	28.6	11.5	9.9	9	38.5	10	Negligible—Bad
Carroll	131	12	24.2	20	4.7	12	28.9	16	Good
Kent	135	13	23.3	21	0.2	15	23.5	21	None—Poor
Talbot	136	14	28.7	10	0.4	14	29.1	15	Good
Harford	152	17	30.4	6	f	f	30.4	13	Good
Cecil	158	18	29.1	9	f	f	29.1	14	Good
Howard	161	19	33.7	4	f	f	33.7	12	Good
Baltimore	266	23	19.4	23	f	f	19.4	23	None—Good

[1]All data in present table, unless otherwise indicated, are taken from Maryland State Board of Education, *Annual Report*, 1926, p. 187, Table 87. Ranks are computed.

[2]Includes both white and colored. Computed from data from Maryland State Board of Education, *Annual Report*, 1924, p. 200, column 5; p. 247, column 18, p. 251, column 9.

[3]County with least wealth per teacher is ranked "1" in need.

[4]Rank among 23 counties. County deriving largest per cent of revenue from state is ranked first.

[5]Rank among 15 counties; 8 counties received no aid from equalization fund.

[6]Received no aid from equalization fund.

School Boards and Superintendents—A Plain Talk

C. W. Meyers

The office of superintendent of schools is not many score years old. We find the board of education and directors of schools first in the personage of a clergyman, who received his compensation from donations. Later when schools began to receive support by public taxation a board of directors, board of education, or board of inspection, as they may be called, were elected by the people.

They formerly examined teachers, issued licenses to teach, and hired the teacher or teachers. The examination probably consisted of solving a problem or two in arithmetic and a muscle test to determine how hard the teacher could lick his pupils. In those days there was not much to teach, only the three R's. The school system consisted of from one to a few teachers. Every teacher taught what and how he pleased.

But, since our school systems have become so large and teaching such a science, laymen on the board of education are not trained to look after the work even if they have the time. Some boards of directors of systems having several teachers looked to the "headmaster" or principal to conduct the affairs formerly attempted by the board. As the systems grew and management of schools became more complicated the office of superintendent was created to take care of the school directing.

The superintendent's duties vary according to size of system. In cities from 5,000 to 10,000 population we usually find one in charge who is supervisor of instruction, inspector of school sanitation, purchasing agent, and adviser to the principals, supervisors of special subjects, nurse, and attendance officer. He is also responsible for training of teachers in service and many other duties that would take too long to name.

On the other hand, the board's principal duties are to employ a competent superintendent, determine general school policies, build buildings, attend to finance, and elect and set salaries of school employees upon recommendation of the superintendent. In many instances it appears that the board of education has little to do, or seems of little importance. Far from that; it is the buffer between the public and the superintendent. The board can either make or break him. "As the teacher so is the classwork." Likewise, "As the board of education so is the school system."

There are several types of board members the same as there are many kinds of superintendents. All have faults. The ones with the fewest and best qualified should head the schools. Many shortcomings can be overlooked if these individuals are always for the best that can be secured with the amount of money available. To the contrary, often board members seek the office for personal gain or make it a "stepping stone" to politics or use the office to repay political debts.

The Selection of Teachers

Unfortunately in Illinois some laws are still in force which were made when no superintendents were available, that state the board of education shall employ teachers and fix salaries. In Louisiana and other states the board of education cannot elect a teacher who is not first nominated by a licensed superintendent. This eliminates a lot of incompetent teachers and politics from the schools. Board members know the quality of coal to buy and what to pay for it. They know the cost of building and grounds, but they do not always know the quality of a teacher or what she is worth to the children and community. Often they do not care to know. They judge a teacher sometimes wholly on qualifications that have very little to do with her teaching abilities. Sometimes a teacher secures a position solely on how many votes her family carries, or on her looks.

In conversation with a board member in a small city I asked him how he selected teachers. He said, "When she comes into my office I can tell whether or not she is a good teacher by the way she meets people and by the space between her eyes." This has very little to do with her teaching qualities. I know some excellent teachers who could not make an impression in public or were narrow or wide between the eyes. I knew another board member who would not vote for a teacher unless she bought at his store. Another was against teachers who did not patronize his office.

I recall a would-be music supervisor interviewing a board in another small city. She was a "saleswoman," and a good looker. She could meet the public; she had the right distance between her eyes, etc. At their board meeting they were about to elect her at a salary of $50 per month more than they had ever paid before without examining her training record. When the superintendent spoke up about her record they were amazed to learn that she had less than nine months' training above the eighth grade and their standard for elementary schools was six years.

The Political School Superintendent

Then too, we have political superintendents who spend half their time "shaking hands" and "bootlicking" to cover up their inefficiency and neglect of work, or to work for reelection. I have in mind two. One remained on the job early and late and gave an excellent administration. He bought his cars, rugs, etc., where he pleased, even if sold by board members. He catered to nobody. He received the highest salary that this community had ever paid, and remained several years.

His successor was the opposite. He left his office at four o'clock, went up town, and shook hands with the fellows. He bought a little from all the stores and traded most with people of greatest influence. He recommended a poor teacher because she was a daughter of one with influence. This man let the system go backward. He never received a high salary and was turned out at the end of a few years.

The board of education in this place was nonpolitical. Had it been, No. 2 might have been there yet and drawing the highest salary. As a rule superintendents are honest and strive for the best schools; therefore, some states have laws that give them power to secure the best to be had for the amount of money the community can afford to spend.

It might not be out of place here to say that board members with low salaries or little income do not always buy the best superintendents; for they cannot see how a school manager can earn any more than they do. The result is they employ a man who does not meet all that the community requires. Also the common idea among laymen is that an ex-school teacher or an ex-principal makes a good school-board member. This is far from right in most cases. In the first place, if he had been a very successful teacher or principal, he would have been able to be superintendent himself. He would have been able to support his family on a teacher's or principal's salary. Then, too, he may have been away from schoolwork so long he is clear out of tune with modern school administration. He may bother his brain with the petty things and let the most important slide.

Ethics for School-Board Members

Any school-board member conducts himself in harmony with this code of ethics adopted in the state of Michigan some time ago, when he:

1. Abstains from soliciting any employee of the school to purchase any given commodity or service such as real estate, insurance, etc.
2. Assumes no personal authority in administering the work of the schools unless he has been instructed to do so at a board meeting.
3. Avoids seeking to secure a school position for a member of his immediate family.
4. Refrains from public criticism of any particular teacher, but, if circumstances warrant, brings complaints to the attention of the proper supervisory officers.
5. Refrains from seeking special privileges for his children or emloyees.
6. Declines to offer a contract to a teacher who is known to be under contract with another school, without first determining the willingness of the teacher's employer to grant a release.
7. Abstains from seeking to perform the duties of the superintendent of schools or any other employee—such as selecting teachers, textbooks, promotion, or placement of pupils.
8. Offers to teachers, only such a contract as is just and equitable in form.
9. Endeavors honestly to contract with teachers on a salary basis that will cover living expenses for twelve months and a surplus for savings.
10. Stimulates and encourages the professional growth of teachers while in service by granting them permission to attend educational meetings without loss of pay, visiting days and by encouraging them to attend summer school, to travel, and in other ways to improve knowledge and skill in teaching.
11. Assist in securing a clear and definite statement and understanding of the duties to be performed by the board of education on the one hand and the duties of the supervisory officers and teachers on the other.

LOS ANGELES SAFETY TRAFFIC TUNNELS

James N. Hatch

In the opinion of the Los Angeles city officials, the safety of its school children is one of the most important considerations of traffic regulation. It is not enough to widen and smooth the thoroughfares so that the automobilist may pass with a minimum of trouble, but there must be adequate facilities for protecting the children and other pedestrians from fast-moving traffic.

SCHOOL CHILDREN ENTERING TRAFFIC TUNNEL, LOS ANGELES, CALIF.

To accomplish this protection a number of pedestrian traffic tunnels have been built under various busy thoroughfares of the city. The first two of these were built in 1918, and another in 1924. The initial tunnels proved so useful and satisfactory, that agitation was begun for the construction of a considerable number of such tunnels, in numerous other locations.

In June, 1925, a municipal bond issue of $350,000 was voted by the city council for the construction of 35 of these tunnels. After some experience it was found that the estimated av-

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Criticisms of Attendance Laws

John F. Bender, Professor of School Administration, University of Oklahoma

School administrators in their experiences with attendance laws have found a number of weaknesses which only enlightened legislation can remedy. The following inquiry in the writings of school administrators has been undertaken with the view of discovering some of the specific weaknesses in attendance laws which these administrators discuss. On the basis of these weaknesses it is possible to suggest desirable changes for the progressive improvement of such laws.

Time They Cover

One criticism is that the compulsory period does not begin the first day of school and does not include the entire term. Many states already have the provision that children shall attend school for the entire term that school is in session, which means that they shall begin on the first day and continue regularly till the last day. Some states, however, have not yet acquired this conception of attendance. In Oklahoma, the law requires attendance for two thirds of the school term. This leads the state superintendent to observe that "Indifferent parents do not send their children to school until one third of the term is over. This causes disorganization of the school and loss to the faithful who begin at the first of the term. The compulsory term should begin the first day of school and should also include the entire term rather than two thirds."[1]

Likewise, the Oklahoma survey recommends that the clause in the law, which permits children to absent themselves one third of the time the school is in session, should be repealed and full-time attendance should be required.[2]

In Texas, it is recommended that the compulsory term be made 120 consecutive school days in 1923-24, then 140 consecutive school days in 1924-25, and 160 consecutive school days in 1925-26 and thereafter.[3]

In Kentucky, one section of the law provides that children between seven and fourteen, inclusive, shall attend school for at least three days a week. The state superintendent writes: "The school law should be amended and made to harmonize with the child-labor law by providing that children between 6 and 16 should attend the school regularly for the full school term, except where an employment certificate is granted a child between 14 and 16, as provided in the present child-labor law."[4]

As one feature of a workable compulsory-education law, a Wisconsin state report would require attendance upon school during the entire school year, excepting time absent with legal excuse.[5] The Alabama survey recommends that the law be changed so as to remove the 80-day and 60-day attendance minimum and require all normal children to attend school throughout the regularly provided school term.[6] The Virginia survey states that for children of fourteen or under, nothing less than regular attendance for the full school year can be considered satisfactory.[7]

Work They Require

Another criticism of compulsory-attendance laws is that they do not require the completion of the elementary course by children between certain specified ages. Ellwood called attention to this condition in the school laws in 1914.[8] He wrote that the laws were failures; that they were wrong in principle. The wrong principle consisted in keeping a child in school a definite period. Parents knew, and children came to know, that after a certain definite time the law could not touch them. They "soldiered" on the school authorities till they had reached the required age. He proposed that educators carefully decide what the minimum education for every boy and girl should be. "Then let every child be 'sentenced' to complete this requirement."

Reports and surveys have dealt with the issue raised by Ellwood. An Indiana annual report states that the old law provided that a pupil might under certain circumstances obtain an employment certificate upon the completion of the fifth grade in school. A new law, passed in 1921, required that an employment certificate should not be issued until a pupil had completed the elementary-school course.[9] An Oklahoma state department report recommends that the attendance law be amended to require all persons between six and twenty-one to complete the common-school course, before they are exempted from the operation of the compulsory-attendance law.[10] A Utah report for 1918 states that the present law requires all children in the state to attend school until they have finished the work of the eighth grade or have reached the age of sixteen years. It suggests an advance on this requirement for all children who have met the requirement, and have gone into industry and are not attending school. It proposes that the attendance law be amended to require at least 144 hours per year of school attendance beyond the present requirements up to the age of eighteen years.[11]

The South Dakota report for 1918-1920 states that a child should be required to attend school regularly until he has completed at least the eighth grade or attained the age of seventeen years.[12] A recent Wisconsin report mentions as desirable requirements of a compulsory-attendance law a school year of not less than nine months, and completion of not less than eight grades of work.[13]

The Alabama survey recommends that the law be safeguarded by limiting its exemption almost wholly to those who have completed the elementary-school course.[14] The report of the state superintendent of Georgia for the year 1921 urges that the compulsory requirements be made to apply to seven grades as well as to certain years.[15]

Provision for Distribution of School Funds

That attendance is not made a basis for state apportionment of school funds is another criticism of compulsory-attendance laws. Apportionment on that basis is one means used by the state for compelling regular attendance by all pupils within the compulsory age limits. The North Dakota school report for 1916 recommends that the state constitution be amended so as to allow the state apportionment to be made on the basis of attendance of pupils rather than on total number of children of school age residing in the district irrespective of attendance.[16] A Kentucky state school report declares that the school fund should be used to stimulate local interest and local support: "The state should say to each county: Send half your children to school and I will give you so much. Send all your children to school and I will give you twice that amount; do so much for yourselves and I will do so much for you; the more you do for yourselves, the more aid I will give."[17]

The superintendent of public instruction for Montana states that if the apportionment of the school funds were based at least partially on attendance, communities would undoubtedly see to it that children were kept in school all the time possible.[18] A similar comment is made in Nevada that "it would be an economy and stimulation of full attendance to have the apportionment of school money based on average daily attendance rather than upon the number of census children."[19] The effect of the apportionment of the larger part of the state elementary-school fund in Tennessee upon the basis of the average daily attendance in all schools was most wholesome upon county officials in securing enforcement of the attendance law.[20]

In the Alabama survey, it is recommended that state school funds be apportioned on some other basis than as at present on school population.[21] Likewise, in the Ohio survey, the distribution of the common-school fund on the basis of enumeration is criticized as putting a premium on the nonenforcement of the law, especially in districts where enforcement would compel the employment of additional teachers.[22] The recommendation is made that the common-school fund be distributed on the following basis: That $50 per teacher employed during the preceding school year be paid to each school district. That the balance of the common-school fund be distributed among the school districts in proportion to their grand total days' attendance for the preceding school year.[23] This is one of the plans most favored by Cubberley.[24] In the annual School Report of Georgia, to the question, "How improve attendance?" the suggestion is made to allot state school funds to the counties on the basis of average daily attendance instead of the school census. It is predicted that such a plan would probably reduce the absences one third and would cause a saving of over $1,000,000 worth of school time.[25]

Age Limits

That the age limits are not broad enough is a frequent failing in the attendance laws. Wisconsin, however, is an exception. Among recommendations for improving the rural schools in that state was a change of the legal school age by constitutional amendment from

[1] Biennial Report of the State Superintendent of Public Instruction, 1918, p. 11.
[2] Oklahoma Survey, 1923, p. 72.
[3] A Handbook of Information as to Education in Texas, 1918-1922, Bulletin 157, p. 74.
[4] Report for Two Years, Ending December 31, 1919, p. XIII.
[5] Biennial Report, 1922-1924, p. 21.
[6] Alabama School Survey, 1919, p. 99.
[7] Virginia Survey, 1919, p. 75.
[8] Education, May, 1914, p. 572.
[9] Report of the Department of Public Instruction, 1922, p. 3.
[10] Biennial Report of the State Superintendent of Public Instruction, 1918, p. 11.
[11] Biennial Report of Superintendent of Public Instruction, 1918, p. 127.
[12] Biennial Report of Superintendent of Public Instruction, 1918-1920, p. 10.
[13] Biennial Report, 1922-1924, p. 21.
[14] Alabama School Survey, 1919, p. 89.
[15] Annual School Report, 1921, p. 32.

[16] Report of Superintendent of Public Instruction, 1916, p. 17.
[17] Report for Two Years Ending June 30, 1923, p. 9.
[18] Biennial Report of Superintendent of Public Instruction, 1920, p. 27.
[19] Biennial Report of Superintendent of Public Instruction, 1923-24, p. 18.
[20] Annual Report of State Superintendent of Public Instruction, 1922, p. 19.
[21] Alabama Survey, p. 99.
[22] Ohio State School Survey, 1914, p. 263.
[23] Ibid., p. 268.
[24] School Funds and Their Apportionment, p. 252.
[25] Annual School Report of Georgia, 1922, p. 17.

"4 to 20" to "6 to 18, inclusive." It was stated that permitting four-year-old children to go to school was a large factor in the lowering of the per cent of school attendance especially in the rural schools.[26] A Kansas state school report recommends a modification of the truancy law so that the age limit be advanced to sixteen years, unless the pupil has earlier completed the common-school course.[27] The age limits of the Kentucky law were unsatisfactory. One section of the law provided that children between the ages of seven and twelve years should be required to attend school regularly for the full school term. Another section provided that children between seven and fourteen, inclusive, should attend school for at least three days a week. It was recommended that the school law be amended and made to harmonize with the child-labor law by providing that children between six and sixteen should attend school regularly for the full term, except where an employment certificate was granted a child between fourteen and sixteen as provided in the child-labor law.[28]

A similar lack of coordination between the attendance law and the child-labor law is recorded in a Texas state report. The compulsory-attendance law provided that children from eight to fourteen years of age must attend school for 100 consecutive days unless exempted for special reasons. The child-labor law forbade the employment in cities of more than 15,000 population of children under fifteen years of age in any mill, workshop, factory, theater, or as messengers, except under certain restrictions; but a child the age of fourteen could not be compelled to attend school. In the larger cities, children were roaming the street, not permitted to work and not compelled to attend school. It was recommended that the law be amended, extending the age to sixteen with the usual necessary exemptions.[29] In the Georgia state school report for 1924, a strengthening of the law is advocated to the end that every normal child fifteen years old or less be compelled to attend school regularly for the term of months required.[30]

The Oklahoma survey recommends that the minimum age for compulsory school attendance be reduced from eight to seven years.[31] The Alabama survey advocates a change of the entrance age from seven to six years.[32] The commission in the Virginia survey recommends a lower age limit of seven instead of eight, and an upper limit of fourteen instead of twelve.[33]

Length of Term

The length of school term is an item for critical examination in some sources consulted. The Alabama school report for 1918-1920 states that if Alabama is to give her white children educational opportunities equal to the average maintained throughout the United States in 1920, the average number of days of school session per year must be increased from 140 to 162, an increase of 15.7 per cent.[34] The Wisconsin biennial report for 1922-1924 gives as one standard of a compulsory-education law a school year of not less than nine months.[35] According to a Virginia state report, nine months or 180 days is the accepted minimum for standard schools, including rural schools.[36]

Among the recommendations of the Alabama survey is a lengthening of the school year to nine months of twenty school days each.[37] The

[26]Biennial Report, 1918-1920, p. 137.
[27]Biennial Report, 1916-1918, p. 79.
[28]Report for the Two Years Ending December 31, 1919, p. XIII.
[29]Biennial Report—State Department of Education, 1922-1924, p. 31.
[30]Annual School Report, 1924, p. 26.
[31]Oklahoma Survey, p. 72.
[32]Alabama School Survey, p. 99.
[33]Virginia Survey, p. 75.
[34]Annual Report of Scholastic Year Ending September 30, 1922, p. 85.
[35]Biennial Report, 1922-1924, p. 21.
[36]Reports for 1918-19 and 1919-20, p. 16.
[37]Alabama Survey, p. 99.

JOHN A. SEXSON.
Supt. of Schools-Elect,
Pasadena, Calif.

Mr. John A. Sexson, of Bisbee, Ariz., has taken up his duties as superintendent of schools at Pasadena, Calif. Mr. Sexson succeeds Mr. John West, who holds the office of deputy superintendent until next June.

Mr. Sexson is a graduate of Franklin Academy, Franklin, Nebr., the Colorado Normal School at Greeley, and Denver University, and has completed graduate work at Columbia University and the University of Colorado. Mr. Sexson has frequently acted as an instructor in summer schools and colleges of education, and during 1925-26 was an instructor at the University of Arizona summer school.

Colorado survey sets no particular length of term but makes the following comment: "It is apparent that the effectiveness with which a school serves the community depends on the length of term quite as much as on the regularity of attendance, and that the average days' attendance, which may be raised by a few regular attendants, is not so important a consideration as the number of days attended by all the children enrolled."[38]

The Census

The importance of the school census as a factor in enforcing attendance is often mentioned in these official reports. The state superintendent of California says that the weakness of the present registration law lies chiefly in placing the responsibility for registering children with parents and fixing no penalty for failure to comply with the law. A bill to remedy the defect passed both houses of the legislature, but was vetoed by the governor.[39] In an Arizona report, the superintendent recommends that the law be reenacted (which had been repealed) reinstating the census marshall, and that census taking be begun September 1 and continue during the first month of school.[40] The South Carolina school report for 1924 discloses that either there is no census of school children or if there is one, it is not used. After stating that the pupils enrolled lose from one fourth to one third of their time through irregular attendance, it concludes with the words: "We have no data showing how many do not enroll at all."[41]

A new census law is necessary in Minnesota. "The state's first need in the administration of its compulsory-education and child-labor laws is an up-to-date knowledge of the whereabouts and condition of all its children of school age. This information is not available under present laws. Therefore, the board feels called on to propose an entirely new school-census law."[42]

The testimony of the New York Attendance Division is that the adequate enforcement of school-attendance laws is dependent upon the continuous identification as regards the name, residence, and whereabouts of children and minors amenable to the law. "The primary purpose of the census act is to clear the way for the operation of the attendance law."[43] New Jersey "imperatively needs a census of school children," according to the 1920 state school report.[44] And in the 1919 report it is stated that "we shall never solve the problem until we find what children there are and whether they are in school. We must not only make the work of the schools better, but we must have all the children in school."[45]

The census law of Utah is criticized as not explicit enough. With an increase in the per-capita distribution of the state school fund, there has been a tendency on the part of school boards to have their census rolls as large as possible.[46] A similar effect of a faulty census law is reported in Texas. Cases are cited of the padding of school census rolls. The places and the amount of padding are named. The state saved $101,380.50 by eliminating names from padded rolls.[47]

In the South Dakota survey, the committee recommends that a careful annual census of the school population in all school districts of the state be made by the authorities now provided by law, but under immediate supervision from the state department of public instruction on uniform blanks to be furnished by the state. The census should classify the school population as follows: five to eighteen years; six to twenty-one; over eight and under sixteen; six to fourteen years; and over fourteen to eighteen. This would give the desired basis for a complete classification for state and federal uses.[48] The Virginia survey recommends that the school census be taken annually in cumulative and continuous fashion through the office of the division superintendent and under his direction.[49]

The school report of the City of Chicago for 1921-22 tells of the need of a school census. A permanent census bureau is recommended. "All metropolitan centers except Chicago have a permanent census bureau. There has been no school census taken in the city since 1918."[50]

No school census is taken in Washington, D. C.: "The absence of any census of pupils of school age in the District of Columbia makes it impossible for the school authorities to make suitable preparation for accommodating pupils who are applying for a public education in increasing numbers. No record exists showing the children of school age who reside in the District of Columbia and who are required by law to attend school."[51]

In a Denver report, among the achievements listed of the previous three years is the following: "The establishment of a continuing school census, which has in one year found 10,000 children, not previously enumerated."[52]

This census brought in state revenue on the 10,000 children at the rate of $2,895 per child, a total of $28,950.[53]

The Hackensack survey states a relation that a census sustains to the average daily attendance. It says that the percentage that the average daily attendance is of the enrollment would be greatly increased through the agency of a school census and a permanent continuing

(Continued on Page 145)

[38]Colorado Survey, p. 56.
[39]Biennial Report of the Superintendent of Public Instruction, 1923-24, p. 32.
[40]Report of the State Superintendent of Public Instruction, 1922-1924, p. 23.
[41]Fifty-sixth Annual Report of State Superintendent of Education of South Carolina, 1924, p. 13.
[42]Biennial Report of Department of Education, 1919-1920, p. 16.
[43]Biennial Report of Department of Education, 1923, p. 263.
[44]Annual Report of Commissioner of Education for 1920, p. 25.
[45]Annual Report of Commissioner of Education for 1919, p. 92.
[46]Report of Superintendent of Public Instruction, June 30, 1920, p. 78.
[47]Bulletin 149, June, 1922, Department of Education of the State of Texas, pp. 18, 19, 20, 21.
[48]South Dakota Survey, p. 48.
[49]Virginia Survey, p. 77.
[50]Chicago School Report, 1921-22, p. 56.
[51]Washington, D.C., School Report, 1920-21, p. 87.
[52]Denver School Report, 1922-23, Section I, p. 9.
[53]Ibid., p. 75.

The Functions of the School Superintendent in Theory and Practice

A Study of the Duties of Superintendents of Smaller Towns and Villages

Cecil Leonard Hughes, Assistant Professor of Education, University of Washington

PART I. THE FUNCTIONS OF THE SUPERINTENDENT DEFINED AND CLASSIFIED

What are the functions of the superintendent? As indicated in a study made for the Department of Superintendence of the N. E. A.,[1] superintendents are rather confused as to the exact nature and definition of their duties in practice. Educational experts on the whole do not seem to be so much in doubt concerning the larger functions, as to their relative importance and the classification of details under major heads.

It is necessary to note the gradual evolution of the several chief functions of the school superintendent before surveying the literature for specific definitions. At first the superintendent's attention was largely given to the mechanical phases of school organization and management.[2] He was interested in the daily routine of the schoolroom, in disciplinary matters, examinations, seating of the children, pay of the staff, and the purchase of supplies. Later came graduation and promotion systems. In short, the emphasis was placed on the structural and static aspects of school procedure. It did not take long, however, for the superintendent to discover that there were many other problems demanding attention—problems susceptible to the caprices of public opinion. He became engrossed in school revenue, relations which the schools should bear to community clubs, associations, and organizations.

In these two early stages are the beginnings of several important duties. The supplying of the elements of the school, the shaping of these into a scheme or working system required the ability of an organizer, an executive, and an administrator. At the same time the recognition of the fact that the school bore a definite relation to community activities, and that the progressive evolution and betterment of the school depended upon the education and support of the community, forced him into community affairs as a leader and molder of public opinion.

A superintendent may have been a good administrator, organizer, and community leader, and yet have failed miserably to construct an efficient school system. A new emphasis or point of contact was therefore sought, and the search resulted in the term *supervision*. Coffman[3] records one of the early ideas of this function by relating that a school board of a large eastern city said it was the business of the supervisor "to cast a genial influence over his schools, but otherwise he is not to interfere with the work of the schools." One early writer said that "supervision is taking a broad view, the general view, and seeing the back and middle grounds as well as the foreground with its details." Such general statements do not define the problems of supervision but rather show the evolution of the idea. The general scope of this function according to Coffman[4] is threefold, the laying out and prescribing of materials and methods, the use of standard tests and scales, and the improvement of the teaching act through criticism of instruction.

Growth of Supervisory Functions

Thomas M. Balliet[5] in an article on city school supervision, asserted in 1891 that the prime duties of a superintendent are: (1) he should be a teacher of teachers; (2) he should hold teachers' meetings; (3) he is to be the educational advisor of the board; (4) he should

[1]H. B. Wilson, Report of the Department of Superintendence, Pro. N. E. A., Mar. 1, 1921.
[2]Coffman, L. D., Proceedings N. E. A., 1917, pp. 187-8.
[3]Ibid.
[4]Ibid., p. 190.

fashion and shape the educational thought of the community; (5) he should take an interest in and study school architecture.

The superintendent's duties according to Fitzpatrick[6] may be summed up in this fashion: (1) he should have the power of appointment and dismissal of teachers; (2) he should recommend needed changes in textbooks; (3) it is his province to criticize the work of the principals and teachers; (4) he must keep in touch with special teachers and their work; (5) it is his privilege and duty to attend board meetings.

Charles E. Gorton in a report to the Department of Superintendence of the National Education Association in 1900,[7] said: "The superintendent should not be expected to serve as the secretary or bookkeeper of the board, nor serve as a distributing agent for books and supplies." He laid stress on the four following functions: selection of teachers, choice of textbooks, inspection and supervision of classes, and study of schoolhouse architecture.

In the report of the United States Commissioner of Education for 1902[8] appeared an article discussing the relationships of superintendent to the board, community, and teachers, which emphasized these functions as belonging primarily to the superintendent: (1) organization and classification of schools; (2) schemes for promotion of pupils; (3) preparation of courses of study; (4) adoption of methods of teaching; (5) promotion of good will among teachers as well as improvement of their instruction; (6) to meet people socially and address them on every possible occasion.

W. E. Chancellor[9] in 1908 emphasized an important professional duty of the superintendent by asserting that he must direct the work and increase the professional fitness of the teachers subordinate to him as well as act as intermediary between board and teachers.

Seeley[10] divides the functions of the superintendent into two major heads:

1. *Executive,* which includes writing reports, formulating plans, constructing courses of study, acting as representative of the board, hearing complaints and suggestions of parents, represent teachers and assume educational leadership of the community.

2. *Supervision,* visits to the schools, observation of teachers' work, educational leader of his teachers, hold teachers' meetings, require reports from teachers, general relations with pupils.

[5]Balliet, Thomas M., City School Supervision, Educational Review II, 1891, December, pp. 482-6.
[6]Fitzpatrick, E. A., Minor Problems of the School Superintendent, Educational Review, XVIII, Oct., 1899, pp. 234-51.
[7]Gorton, C. E., The Superintendent in Small Cities. Proceedings, N. E. A., 1900, p. 222.
[8]Brodeur, C. A., School Supervision, Report of the Commissioner of Education, 1902, Vol. I, pp. 556-60.
[9]Chancellor, W. E., The Duties and Privileges of the Superintendent of Schools, Journal Education, Dec. 17, 1908, pp. 651-2.
[10]Seeley, Levi, New School Management, pp. 261-78.

Growth of Duties

Chancellor[11] in his book on administration, gives a long list of the specific duties of the superintendent. The more important ones are: attendance at board meetings, preparing reports to the board, visiting classes, keeping records, hearing complaints of parents and pupils, disposing of correspondence, interviewing candidates for positions, talking at school assemblies and elsewhere as official head of the schools, informing oneself thoroughly as to the latest advances in school architecture, hygiene, sanitation, ventilation, lighting and heating, courses of study, textbooks, scientific apparatus, college requirements, new educational methods and devices; hold and attend teachers' meetings, attend educational-association meetings, citizens' meetings, etc.; organize and help to organize parent-teacher associations, school entertainments, etc.

Cubberley[12] classes the functions of the superintendent under three main heads: organizer, administrator, and supervisor. This same classification is given by Denfeld[13] with an elaboration of the duties which would fall under each function.

Dutton and Snedden[14] sum up the situation in the following manner:

> " . . . We find throughout the country every possible grade of power and opportunity granted to the superintendent. He is seen as a mere clerk or servant of the board, simply carrying out directions as given by them, or we find him possessing almost autocratic powers and acting quite independently of the board. Between these extremes we can observe every kind of practice imaginable; but the trend is so strongly in favor of giving by statute large powers to the superintendent in all educational matters that we prefer to consider his functions as related to the more ideal situation which we believe will soon prevail throughout the country."

The foregoing survey of the duties of the superintendent as expressed by educators[15] for the past 25 or 30 years represents an interesting evolution of school administration. These duties are gradually becoming more fixed and definite and quite generally accepted as the prime functions of the superintendent. This is shown by a recent study made by the United States Bureau of Education[16] of the rules and regulations of 50 of the smaller city school boards. The results are summarized as follows:

> "Act as executive officer of the board, 36; have general supervision of instruction, 50; recommend teachers, 10; assign and transfer teachers, 12; recommend dismissal of teachers, 5; keep a record of teachers' work, 20; suspend employees, 12; attend board meetings, 21; make suggestion to the board for improvement of schools, 25; suspend pupils, 45; supervision of the promotion of pupils, 35; prepare courses of study, 12; recommend textbooks, 3; hold teachers' meetings, 25; visit schools as often as possible, 45; keep informed of school conditions elsewhere, 35; make monthly or annual reports to school boards, 35; hear complaints of parents, 6; fill temporary vacancies, 20; supervise janitors, 20."

The study gives the following interpretation to the above data:

[11]Chancellor, W. E., Our Schools: Their Administration and Supervision, pp. 173-4.
[12]Cubberley, E. P., School Administration, p. 142.
[13]Denfeld, R. E., Proceedings N. E. A., 1900, pp. 287-94.
[14]Dutton, S. T., & Snedden, D., Administration of Public Education in the United States, p. 230.
[15]Attention is called to the fact that the above classifications of the duties of the superintendent were made with city-school administration in mind and do not in all instances apply to the administration of the smaller schools.
[16]Bureau of Education Bulletin, 1915, No. 44, p. 62ff.

"Though few of the rules and regulations expressly give the superintendent power to nominate teachers, 72 per cent of 1,327 superintendents reporting say that they nominate teachers either to the board or to the teachers' committee. In several states, as Massachusetts, Rhode Island, and South Carolina, 90 per cent of the superintendents reporting nominate teachers. Of the superintendents reporting, 38 per cent are sometimes permitted to appoint teachers, but this is permitted as a rule only when a teacher is needed immediately. . . . In 64 per cent of the cities reporting, the superintendent recommends salaries paid teachers and others employed. . . . Only 15 per cent of the superintendents reporting are permitted to dismiss employees temporarily or until the board acts, provided the suspended employee asks for a hearing. . . .

Thirty-six per cent of the superintendents are permitted to expend money without special authority. In almost every instance such expenditure is for absolutely necessary supplies and for amounts usually not to exceed $25. . . .

As a rule, superintendents attend board meetings, but about 57 report that they do not, and a few others that they attend when invited. The rules and regulations of many boards require the attendance of the superintendent upon board meetings and give him a voice, but not a vote. . . . Only 6 of the 50 rules examined state that it is the duty of the superintendent to hear complaints of parents or others. . . .

Of the 50 rules examined, only 3 require the superintendent to select textbooks. In practice, however, 955 of 1,327 superintendents reporting say that textbooks are adopted on their recommendation. . . .

One of the rules of most school boards is that the superintendent shall visit the schools as often as his other duties will permit. The only other duties that should keep a superintendent from visiting classrooms are: preparing for teachers' meetings, visiting schools in other cities, preparing outlines and courses of study, preparing reports for the school board, answering such correspondence as cannot be answered by his secretary, interpreting statistics relating to retardation, etc. In brief, a superintendent in a small city school can, if he has clerical assistance, be out visiting the schools at least two thirds of his time."

Community Leadership

The study emphasizes the function of community leadership in this fashion:

"One of the duties of a superintendent usually tacitly understood is that of keeping the community interested in its schools. The success of any school system has been found to depend largely upon public opinion. It is the history of schools everywhere that reforms cannot be forced upon the public; that they must be educated to the necessity of having better schools.

Progressive school boards are now demanding that the superintendent keep the public informed of school conditions, that he inform the public by carefully compiled data whether the schools are turning out a good product, whether they are doing this most economically, and whether they could still turn out a better product with an increased school budget."

The above summary indicates in a general way the present sentiment of the boards of the smaller cities toward functions of the superintendent. The duties of superintendents in the larger cities are more specifically defined by law, as shown by J. C. Morrison's study[17] of the provisions made in 34 states for the administration of city schools by general legislation for cities of the first class and by special city charters. According to the judgment of educational leaders, the superintendent should be made legally responsible for initial and executive action in 34 of the 35 functions as given by Mr. Morrison.[18] On the other hand the judgment of board members would make him logically responsible for the supervision of instruction and all activities directly pertaining to this function while they would make the board responsible for the material side of the school plant.

The Legal Requirements

A few of the states however recognize the need of defining the superintendent's functions even in the smaller cities.[19] Michigan specifies that:

"In all villages and cities organized as graded-school districts the board of education must employ a superintendent who shall have the following duties: (*a*) To recommend in writing all teachers necessary for the schools, and to suspend any teacher for cause until the board of education, or a committee of such board, may consider such suspension; (*b*) to classify and control the promotion of pupils; (*c*) to recommend to the board the best methods of arranging the courses of study and the proper textbooks to be used; (*d*) to make reports in writing to the board of education and to the superintendent of public instruction annually, or oftener if required, in regard to all matters pertaining to the educational interests of the district; (*e*) to supervise and direct the work of the teachers; (*f*) to assist the board in all matters pertaining to the general welfare of the school and to perform such other duties as the board may determine."

Another example is that of Wisconsin:

"In all cities except cities of the first class the superintendent's duties shall be: To examine and license teachers; to supervise the administration of the courses of study; to have general supervision of the professional work of the schools of the city, including the holding of teachers' meetings and the promotion of pupils; from time to time make a written report to the board of education or board of school commissioners embodying such recommendations relative to the employment of teachers, adoption of textbooks, changes in the courses of study, enforcement of discipline, and such other matters as said superintendent may deem for the best interests and welfare of the cities' schools; to make such other reports and to perform such other duties as the board of education may direct and which are not in conflict with the provisions of this act."

The foregoing study of the duties of superintendents reveals four outstanding functions, namely, administrative, supervisory, community leadership, and professional growth. For the purposes of this paper the "organizing" function, as mentioned several times, may well be included under "administration."

Because the function of supervision is lodged with the superintendent, who is also the administrative and organizing head of the schools, it is likely to be sacrificed to these other functions.[20] Yet while there is much overlapping of responsibility and power between these functions, for the purposes of definition and discussion, if not for the sake of efficient schoolwork, they should be kept separate.

It early became recognized that the schools bore a very direct relation to the community. The public must be educated on the needs of the schools if progress is to be made and gradually this responsibility was placed upon the superintendent. He must also have an interest in the general welfare of the community and exhibit this interest through participation in clubs, associations, and social groups of various kinds. Schoolmen generally call this function "community leadership."

Teaching as a Duty

Mention was made a number of times that it was incumbent upon the superintendent to give his attention to "the latest advances in school architecture, textbooks, methods of teaching, courses of study, etc.," and that he must "keep himself informed of school conditions elsewhere, etc. While the performance of these duties will exhibit results in the administration of the school, yet they are of a sufficiently different type to warrant distinct classification. This function has been termed "professional study and growth."

An examination of the Washington state high-school directory reveals the fact that a great majority of superintendents in small towns actually do classroom teaching. The assumption is further borne out by the United States Bureau of Education report which says that "superintendents in 24 per cent of the cities teach (1,327 superintendents reporting); some but one period a day, others the entire time. This is as a rule, true only in towns and cities under 5,000 population.[21] In view of the foregoing facts it has been thought expedient to insert "teaching" as one of the functions, not because it is believed that this is one of the superintendent's main duties or that he should spend part of his time in the capacity of teacher but to ascertain what part it actually plays in the distribution of his time.

It will be noted that there are a great many duties of a secretarial nature; for example, "keeping records," "disposing of correspondence," "compilation and collection of data for reports," "the writing of notes to teachers and parents," "caring for supplies," etc. These have been mentioned in connection with administrative duties, but they may well be classed under a separate head termed "clerical."[22] It is obvious that the mechanical aspect of duties of this nature should never fall to the superintendent if it is considered that it is plainly a waste of his time and a loss of money to the school district. Such services can be performed by a competent clerk at a very much less cost. The fact remains, however, that some of this work must be done by the superintendent in the smaller cities, and it must be taken into account in the distribution of his time.

What College Professors Hold

The following represents a tentative formulation and classification of the superintendent's functions, which was recently presented in questionary form to university professors for correction or alteration and their judgment as to the importance of each:

Administration: Act as executive officer of the board; recommend hiring and dismissal of teachers; assign and transfer teachers; attend board meetings; suspend pupils; prepare courses of study; recommend textbooks; hold teachers' meetings; hear complaints of parents; fill temporary vacancies; supervise janitors; care and inspect school property; cases of "discipline"; management of activities, i. e., playgrounds, athletics, plays, etc.; preparation for school assemblies, programs, etc.

Professional Study and Growth: Keep informed of school conditions elsewhere; visit other schools; attend educational conventions; read educational journals; confer with teachers about their problems and help to solve them; study the bulletins of the United States Bureau of Education and other publications; personally conduct research on school problems, etc.

Teaching: Regular classes in high school; regular classes in elementary school; substitute in either; preparation for these classes, etc.

Clerical: Keep record of teachers' work; monthly or annual reports to board on school conditions; reports to state or county superintendents; answer inquiries and questionaries; write notices to teachers, pupils, and parents; receive and care for new stock; write requisitions for supplies, etc.; all types of correspondence relating to the school and its administration, etc.

Supervision: General supervision of all classes in the school; supervision, promotion, and demotion of pupils; advise teachers; evaluate teachers; conduct experiments with aid of teachers; demonstration lessons; give standardized tests; improvement of teachers and teaching, etc.

Community Leadership: Attend and take part in men's clubs, commercial, community, or welfare organizations; assist in organizing such clubs if there are none; promote the making of community surveys; confer with citizens relating to community needs; organize parent-teacher associations, etc.

It was found, however, when replies were received that few alterations were made. Two of the 58 replies suggested that there was considerable overlapping in the major functions as listed. It would be practically impossible to

(Continued on Page 146)

[17]The Legal Status of the City School Superintendent, Chap. IV.
[18]Ibid., p. 100.
[19]Bureau of Education Bulletin, 1922, No. 2, pp. 31 and 33.
[20]This assertion is borne out by the facts of practice as given in a later article.
[21]Deffenbaugh, W. S., School Administration in the Smaller Cities, Bureau of Education Bulletin, 1915, No. 44, p. 65.
[22]It is recognized, however, that many duties the superintendent must perform are administrative in character which may seem "clerical," viz., supervision of the filing and keeping of records is administrative while the necessary typing, labeling, etc., incident to this work is clerical. There are types of correspondence that the superintendent must answer himself.

Landscape Development of School Grounds

M. Walter Pesman, Landscape Architect for the Denver Public Schools

There is urgent need for a definite outline of the efficient layout of school grounds. Until very recently the landscape development of school grounds was thought of as a rather vague problem. Every community dealt with it according to its own lights and inclinations, some pooh-poohing the idea as a most visionary dream of unpractical idealists, others going to the other extreme of setting aside large areas for lawn, shrubs, geranium and canna beds, and incidentally burdening their successors with an unforeseen but expensive upkeep.

We must try to get down to a common-sense basis. If landscaping of school grounds is worthwhile (and this is now generally conceded), how far shall we go? And how fast?

Briefly, reasons for such development can be enumerated as follows:

1. Proper setting for the building, be it well designed or badly proportioned.

2. Desirability of making the school an attractive and pleasant place for the child to come to.

3. Educational value in matters of art appreciation, citizenship, and plant study.

To what extent shall we compromise in cases where these values clash with other needs?

The first difficulty, and a real one, is presented by the school with cramped play space. It would be unwise and impractical to attempt the growing of living plants on grounds which fall far short of measuring up to the required play space. Play is not only of cultural value; it is a requisite for the growing child.

Denver in its school-ground development is constantly keeping this fact in mind. While most of our schools can boast of at least some landscaping, there are a few where such an attempt has been kept at a minimum in order not to take away any needed play space. Two roads for improvement suggest themselves in such a situation:

COLE JUNIOR HIGH SCHOOL, DENVER, COLO.
Note especially at the left the planting which screens out the service court at the rear of the building.

1. The acquirement of more land to restore the proper balance between space and the number of pupils.

2. A limited planting in such corners as constitute a sort of eddy in the tide of play and games.

At the very worst it may be possible to plant trees (and possibly lawn) in the "parking" between sidewalk and curb.

Another difficult situation arises where the grounds, though sufficient in area, are badly arranged and perhaps divided up into small units, each insufficient for the proper running games, so much desired by our physical directors.

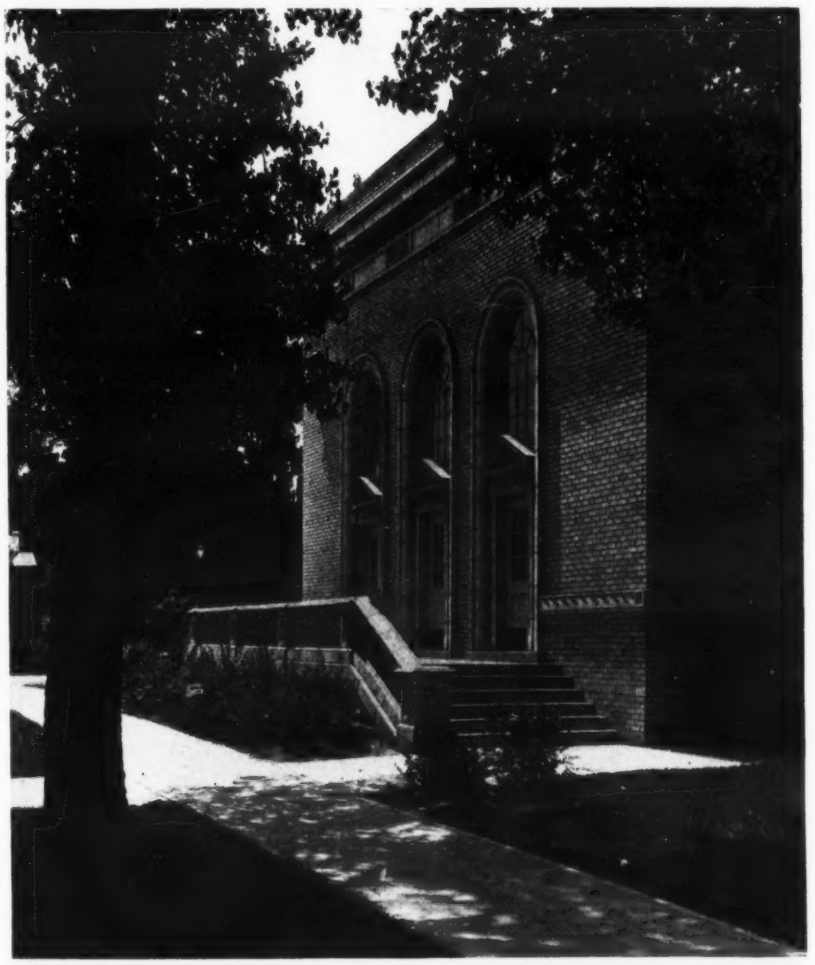
This calls for proper replanning. Some of these divisions may be caused by improperly placed trees or shrubs. Possibly playground apparatus can be moved to reestablish the proper open space arrangement. In some cases it may even be feasible to regrade a playground to remove an interfering bank. In not a few cases the offending obstacle may be a walk or a coal drive, the location of which might easily be changed to great advantage.

In such replanning it is often possible to set aside a piece of ground, preferably in front of the building, which is too cramped for an ideal playground, while forming a pleasing greensward in contrast to the remaining bare spaces.

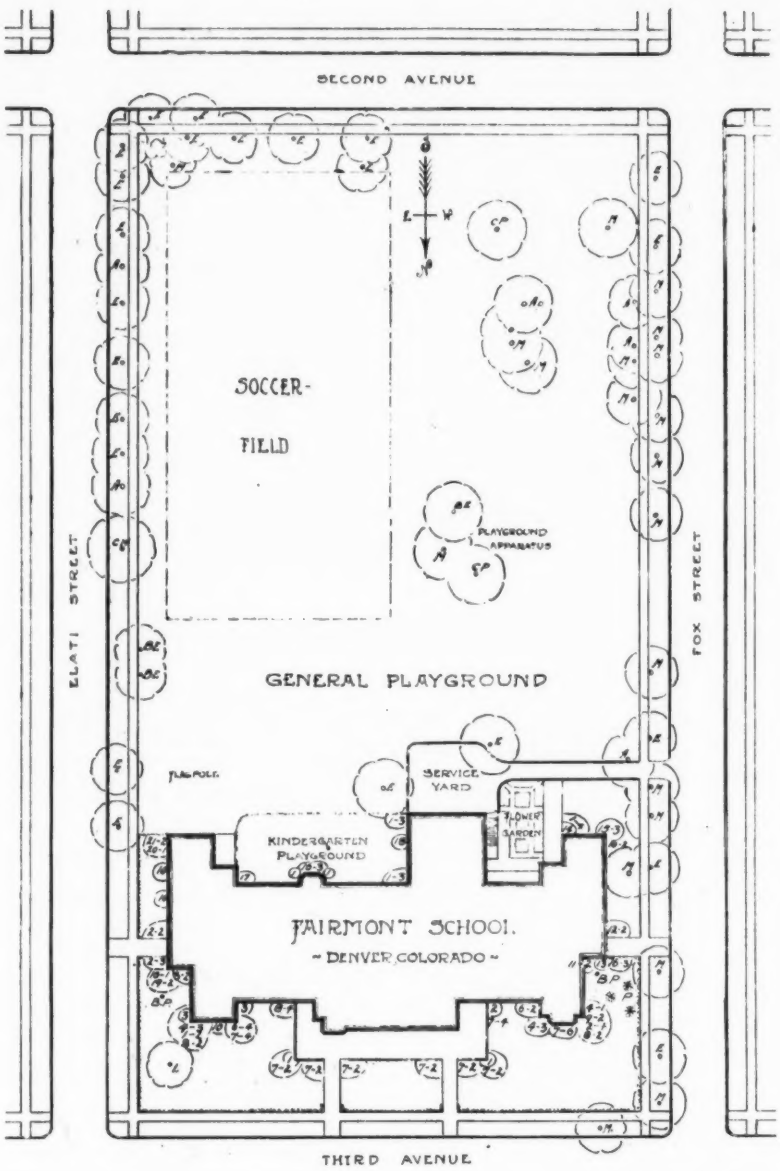
Many a problem of this nature remains unsolved until the ground is mapped out, whereupon it may show itself amenable to a simple solution.

A number of small grievances against landscape development of school grounds can be treated under the heading of unwarranted generalization. I refer to such arguments as shrubs and vines damaging the building, a moist lawn being conducive to children's colds, trees interfering with air drainage, shrubs forming immoral hiding places, flowers spreading hayfever, irrigation endangering the building's foundation. Many of these arguments are not made in good faith, but are used by people who have an axe to grind. As a Dutch proverb has it: "When you want to beat a dog, it is easy to find a stick." A well-built structure and a properly planned park cannot fairly be criticized on these counts as is proved by many public buildings in Europe and America, which have gone through the centuries unscathed. Where any of the foregoing obstacles are well-founded, each case must be treated on its own merits.

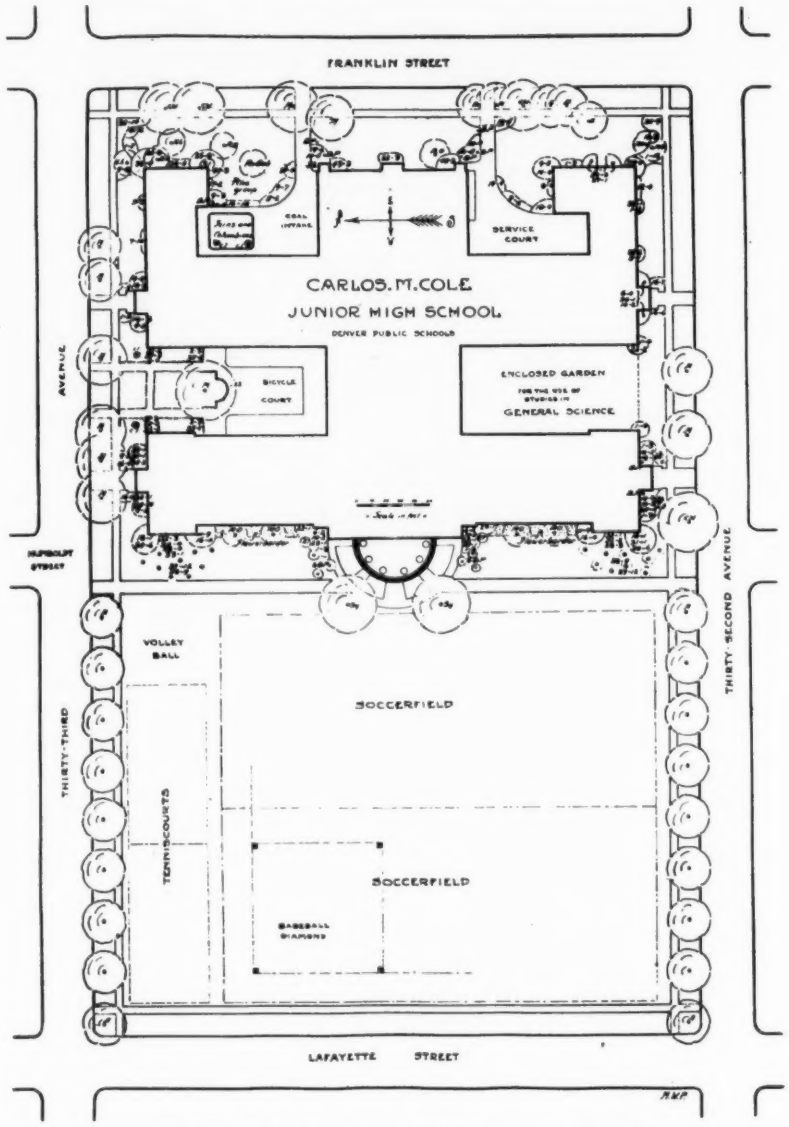
A most insidious difficulty met in any landscape development and especially in that of school buildings is of a psychological nature. You wonder why certain schools do not seem to "make a go of it" and you cannot put your finger on any one particular reason. You will find that somewhere along the line there is a



ENTRANCE TO AUDITORIUM, EBERT ELEMENTARY SCHOOL, DENVER, COLO.
The planting screens the base of the entrance platform and keeps boys from climbing over the balustrade.



PLOT PLAN FOR A GRADE SCHOOL.



PLOT PLAN OF A JUNIOR HIGH SCHOOL PLANT.

PLANTING LIST, KEY TO ATTACHED PLANS

Key No.	Botanical Name	Common Name
1.	*Spiræa vanhouttei*	Bridal Wreath.
2.	*Ribes. aureum*	Buffalo Currant.
3.	*Philadelphus coronarius*	Mock Orange.
4.	*Lonicera tatarica*	Tartarian Honeysuckle.
5.	*Caragana arborescens*	Siberian Peashrub.
6.	*Viburnum opulus*	Highbush Cranberry.
6a.	*Viburnum opulus sterile*	Snowball.
7.	*Symphoricarpos vulgaris*	Indian Currant.
8.	*Symphoricarpos albus*	Snowberry.
9.	*Cornus Sanguinea*	Red Dogwood.
10.	*Rhus glabra*	Smooth Sumach.
11.	*Opulaster opulifolia*	Ninebark.
12.	*Acanthopanax pentaphyllum*	Five-leaved Aralia.
13.	*Acer tataricum*	Cork Maple.
14.	*Syringa vulgaris*	Lilac.
15.	*Sambucus canadensis*	Elder.
16.	*Berberis thunbergi*	Japanese Barberry.
17.	*Tamarix sp.*	Tamarisk.
18.	*Eleagnus angustifolia*	Russian Olive.
19.	*Spiræa arguta*	Hybrid Snow Garland.
20.	*Spiræa douglasii*	Summer Spiræa.
21.	*Robinia hispida*	Rose Acacia.
22.	*Ligustrum vulgare*	English Privet.
23.	*Euonymus atropurpureus*	Wahoo.
24.	*Viburnum lantana*	Wayfaring Tree.
25.	*Viburnum dentatum*	Arrowwood.
26.	*Viburnum lentago*	Sheepberry.
27.	*Cydonia japonica*	Japanese Quince.
28.	*Pinus mughus*	Dwarf Mugho Pine.
29.	*Rhus cismontana*	Dwarf Sumach.
30.	*Rhus hirta*	Staghorn Sumach.
31.	*Acer ginnala*	Siberian Maple.
32.	*Cratægus cordata*	Hawthorn.
33.	*Amelanchier canadensis*	Juneberry.
34.	*Syringa pekinensis*	Chinese Lilac.
35.	*Ligustrum regelianum*	Regel's Privet.
36.	*Philadelphus coronarius*	Mock Orange.
37.	*Forsythia suspensa*	Weeping Golden Bell.
38.	*Salix pentandra*	Laurel Leaf Willow.
39.	*Salix caprea*	Pussywillow.
40.	*Sepherdia argentea*	Buffalo Berry.
41.	*Spiræa prunifolia*	Plum-leaved Spirea.
42.	*Prunus japonica*	Flowering Almond.
43.	*Syringa persica*	Persian Lilac.
A.	*Fraxinus americana*	Ash.
B. S.	*Picea pungens*	Colorado Blue Spruce.
B. E.	*Acer negundo*	Box Elder.
B. P.	*Populus alba bolleana*	Bolle's Poplar.
C. J.	*Juniperus scopulorum*	Colorado Juniper.
C. P.	*Populus carolinensis*	Carolina Poplar.
C. W.	*Populus occidentalis*	Cottonwood.
E.	*Ulmus americana*	American Elm.
L.	*Tilia vulgaris*	Linden.
M.	*Acer dasycarpum*	Soft Maple.
P.	*Pinus scopulorum*	Native Pine.
R. Oak	*Quercus rubra*	Red Oak.
Sy.	*Platanus occidentalis*	Sycamore.

negative attitude. The principal and teachers (and consequently the children) may not be convinced of the value of the idea, or the community is negative and the result is a half-hearted improvement which, sooner or later, will fall by the wayside unless this attitude can be changed.

However, all of these difficulties are as naught compared with the big problem of finance. Probably the outstanding reason for many unattractive school grounds is tied up with the question "Does it pay?" raised by the school board and asked by the taxpayer. It is the big question which no school administration can afford to sidestep.

The fact is, landscaping does *not* pay in the meaning many people attach to it—not in directly increased earning capacity of the pupils.

Nobody will question the wisdom of proper maintenance in carpentry, plumbing, painting.

FAIRMONT ELEMENTARY SCHOOL, DENVER, COLO.
The low hedge harmonizes with the pronounced building lines.

UPPER LEFT: West High School. Planting at Doorway first season after building was occupied; UPPER RIGHT: Edison Elementary School. Lavendar Michaelmas Daisies against the dark red brick of the building. These flowers bloom early in the Fall when the children return to school; LOWER LEFT: The Sherman Elementary School. Planting arranged to soften the harsh architectural effect of an oldbuilding. The photograph was taken after November 1st; LOWER RIGHT: The University Park Elementary School. The planting at the side of the building has been especially planned to break the large blank wall spaces which are extremely uninteresting if left bare.

But when it comes to spending money on initial landscape development which, in its turn, calls for more expenditure in maintenance of growing materials—the unthinking public frowns and the superficial board member hesitates.

Nothing short of a well-considered weighing of values should decide the issue. Money values versus educational values and aesthetic values.

Many important issues at the time of their inception had to be decided in a similar way. The very question of universal nontuition education was debated on this financial basis.

We paid a high price to abolish slavery, our democracy was bought at a great expense; city parks and boulevards are a never-ending drain on the taxpayer. Are *they* worth while?

In one word, if a thing is worth doing it should stand on its own merit. If it is sociologically sound, it will eventually pay for itself in an indirect manner.

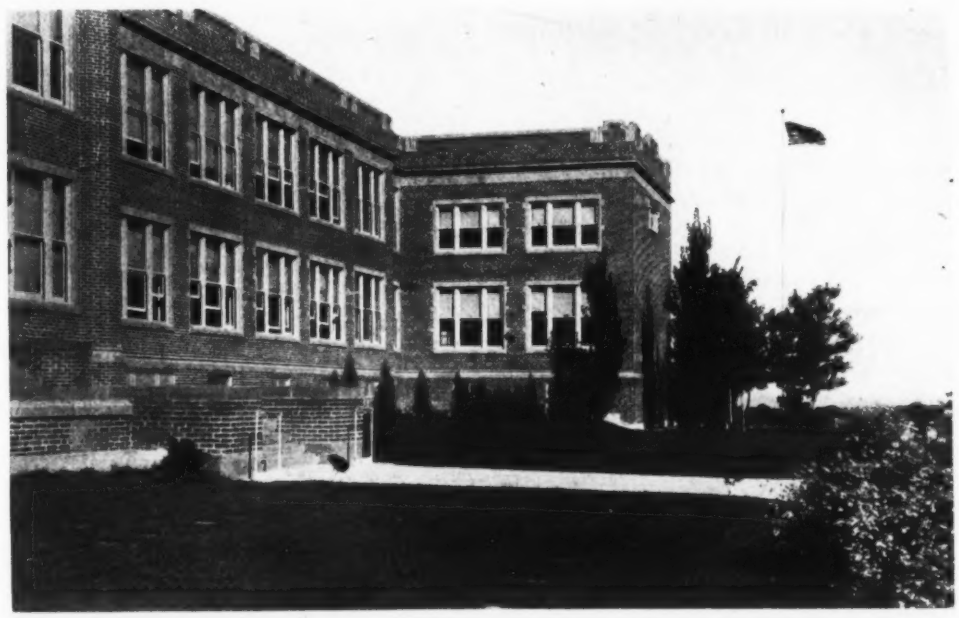
Following is a concise outline of the general principles used in planning the school grounds in Denver:

In placing a new building sufficient lawn space is left in front to show its architectural beauty to the observer passing along the street. This leaves the main bulk of the playground facing the opposite side of the building. Naturally the gymnasium will be placed on this side. Whenever possible we prefer to orientate the building in such a way as not to shade the playground. This prolongs the season of usefulness of the grounds to a marked extent. This playground is left intact except for planting along its edges. The main landscaping features are thus found in front of the building and on the two sides. Whenever possible a piece of ground is set aside in a convenient corner for the use of school gardens.

One of the first things considered in the general layout is the matter of walks and drives. They must be direct, of ample width, and serviceable during all sorts of weather.

In a certain sense these walks and drives form the skeleton of the landscape design. The connections between main entrances and leading to the street of necessity form the boundaries of the lawn areas. If planned carefully, they should obviate any desire to cross the lawns at other places. This is the only proper solution of the "keep-off-the-grass" problem. Most people have the innate desire to respect growing things and do not need fences or artificial barriers to keep them on walks that lead them to their destination. In quite a few cases we have removed existing fences and, while adding beauty, we have at the same time created the atmosphere of confidence and democracy appreciated by both children and outsiders.

(Concluded on Page 132)



SKINNER JUNIOR HIGH SCHOOL, DENVER, COLO.
Columnar Junipers and Lombardy Poplars have been carefully located to repeat the vertical lines of the building.

Principles Governing the Employment of Teachers

Dr. E. B. Carney, a former president of the board of education of Fort Scott, Kans., in an address delivered before the board-of-education section at the Kansas State Teachers' Meeting in Pittsburg, discussed the principles which should govern in the selection and appointment of teachers in the schools. Dr. Carney out of his own experience and observation gave some suggestions for the guidance of boards of education in employing teachers. In part, he spoke to the school-board members as follows:

Our schools are established by the state and are for the good of the people as a whole, especially for the oncoming generations. Even our local schools must fit in with the schools of your town and other towns. We are not independent and it is well that we are not: there must be a greater control than a local one.

A glance at the history of our schools will prove that they were in the beginning an expression of local thought. At present the state specifies a general plan and certain standards uniform throughout. Efficiency after all is very largely dependent on the individual teachers. It is absolutely necessary for us as school-board members to guard carefully the character of the teaching force. The merit of the candidates should be the paramount consideration. If a teacher is selected on any other basis, the schools will suffer. Not only the department which is taught by an unworthy teacher, but the influence of an unmeritorious appointment, will affect the spirit of the entire organization.

I doubt if we ourselves fully appreciate the faith which the public has in the schools and the teachers. The demands made upon the modern teacher are a real challenge to the best material available. The most serious responsibility we have is to guarantee a competent, well-trained, harmonious teaching organization.

There is always pressure on boards of education to employ home teachers. It is a fact that they can usually be secured for less money than those coming in from outside. This, of course, would be an advantage to the public if they could be selected on a merit basis without local political influence, and if they could be discharged when such discharge is desirable, without an uproar.

There is a large surplus of people waiting to teach at the present time. Only the best trained and those with successful experience can readily leave home and find employment. This leaves large numbers of inexperienced teachers, and those with unsuccessful records at home, to pester local boards of education. Very often these people have more college training than other candidates due to the fact that they have used the time when unemployed to get further training. The board is then charged with employing outsiders with less preparation if they do not take local people of the type just described. All sorts of pressure is brought to bear to secure appointment; religious influence; political influence; the argument that the family is a heavy taxpayer; or that the candidate is poor and must have the income to support herself or those dependent upon her—are a few of the many arguments commonly used. Political bosses may try to strengthen their position in the community by catering to influential families in an effort to influence teacher appointment.

In all such procedure, the board of education needs to remember that the schools are run for one purpose only and that is the greatest welfare of the childhood of the community. They are not run to return taxes to heavy taxpayers: they are not run to provide an income for the teachers; they are not run for political purposes of any kind.

If the teaching staff is lowered in its possible efficiency, the pupil suffers. The school system and community at large suffers when politics is allowed to influence employment of teachers on any other basis than that of merit.

It would certainly be a mistake for a school system to have only home teachers, especially if they are mostly graduated from one school. This results in what is known as an inbreeding of professional ideas and practices. School systems need the stimulus which come from the influences of several institutions. If such teachers are encouraged to contribute something to professional programs, they become a great inspiration to other teachers within the system.

As I have indicated above, the appointment of a rather large percentage of home teachers has some advantages, if their selection is made on a legitimate basis. The real problem for us as members of boards of education is, therefore, to adopt some policy which will make that possible. In view of the problem outlined, I believe it is more important now than ever before to place the nomination of candidates entirely in the hands of the superintendent. If the board is given the right to reject the nominations and ask for further nominations, the interests of the public are safeguarded. No teacher should be selected without the indorsement of the superintendent. The board of education, of course, should insist the results be secured in the schools, but it is not competent to select teachers. The heaviest responsibility that a superintendent has is that of the organization of his teaching force. If he cannot do that satisfactorily, another person should be secured for the place. Board members are usually business and professional men. They should be relieved of the embarrassment incident to the rejection of candidates for teaching positions. They can easily relieve themselves of embarrassment if they make it clear to the public and to the candidates that the superintendent's indorsement must be secured. Of course, if we place this responsibility on the shoulders of the superintendent we must protect him by expressions of confidence in his fairness, justice, and capacity to handle the situation. If perchance he should make an appointment that we cannot as individuals approve, if the majority of the board approves the appointment of the candidate, we should refrain from criticism.

At a time like this, when teachers are plentiful, I believe towns of the first and second class can greatly simplify the problem for the superintendent by the adoption of a policy requiring two years of successful experience in addition to the standard preparation courses. If the home teacher is compelled to show a requisite of two years' successful work, it is quite likely she will succeed in her home system. It gives the superintendent something tangible upon which to refuse appointment if the merit shown is not entirely satisfactory.

As a rule, teachers who attempt to use all sorts of political influence to secure an appointment, should be rejected for that reason alone. Ordinarily these influences continue to interfere after the appointment is made—a better position is desired, or perhaps a better salary insisted upon. If perchance it seems desirable to dismiss the teacher, all sorts of embarrassment usually come to the superintendent and board of education.

If the community learns that political procedure is a handicap to the candidate, much trouble will be avoided. On the other hand, if political appointments are made, and the impression gets abroad that illigitimate factors influence the appointment of a teacher, there is no end to the trouble which is thereby started.

The human man is the observant man, and the human man sees always with an eye of humor. An observant being is never an uninteresting being. To see things really, to watch the myriad manifestations of life in the animal, the vegetable, or the man world, is to make the mind alert and the personality characteristic. There never was an enthusiast, a man with a hobby, a student of created things, an expert, who was not interesting. No man could be witty or humorous who was not observant, whose eye was not all-embracing, whose ear was not quick to hear and senses swift to perceive.—Gilbert Parker.

Cooperation Between School Officials and Employees

One of a Series of Letters from a Superintendent

To All Officers and Employees of the School Department:

In the "Meditations" of Marcus Aurelius we read: "Begin the morning by saying to thyself, 'I shall meet the busybody, the ungrateful, the arrogant, the deceitful, the envious, and the unsocial. All these things happen to them by reason of their ignorance of what is good and what is evil. But I who have seen the nature of the good, that it is beautiful, and of the bad, that it is ugly, and the nature of him who does wrong and that it is akin to me, not only of the same blood and seed, but that it participates in the same intelligence and the same portion of the Divinity—I can neither be injured by any of them for no one can fix on me what is ugly, nor can I be angry with my kinsman, nor hate him for we are made for cooperation, like feet, like hands, like eyelids, like the rows of the upper and the lower teeth. To act against one another then is contrary to nature, and it is acting against one another to be vexed and to turn away.'"

In order to have a successful school system there must be cooperation between the teachers and the pupils, between the teachers and the home, between the teachers and the principals. There must be cooperation among all officers and all employees of the school department, including the school board. There is no worker anywhere in the school system who can make his work so successful or independent that he does not need the assistance and cooperation of every other worker. No teacher and no officer or employee can be truly successful without this cooperation. Every worker in the school system should, for his own advantage and for the good of the schools, devise means for bringing about and fostering the cooperation of everyone who is directly or indirectly concerned with the schools.

This lesson in cooperation which was taught by Marcus Aurelius, the noblest of the Roman emperors, is not found in any textbook on pedagogy. It is not contained in any book on supervision and school administration. Nor is it outlined in any chapter on janitor service, but it is a lesson which every successful principal, teacher, and school officer or employee has learned and which every beginner, regardless of natural ability and professional training must learn in order to be successful in school work.

Cordially yours,

Superintendent of schools

The Constitutional and Legal Basis of Transporting Pupils to and from School

Glenn H. Kelly, Superintendent of Schools, Houghton, Mich.

(Concluded from December)

V.—Employing Parents to Transport Children

The courts have generally held that with certain limitations parents may be paid for transporting their own children to and from school, or receive cash compensation for each child of school age attending school. In ruling on the case of School District v. Atzenweiler[33] the court said: "Laws which impose liabilities on school districts for transporting pupils to and from school are valid and wholly within the meaning of the constitution, and funds may be used to pay parents for transporting their own children."

A statute providing for the transportation of pupils of consolidated districts does not deprive children or guardians of any constitutional rights merely because the option as to furnishing transportation or paying compensation therefor lies in the discretion of the school authorities or in the judgment of the people through election.[34] If, however, the school board, according to a Kansas decision,[35] elects to pay the parent cash, it must pay at least the minimum prescribed by law for each child of school age conveyed to and from school, though several may be attending from the same family.[36] The Kansas court seems to be the exception in requiring that the children be actually conveyed.

Noncompliance with the compulsory-education law does not prevent a parent from recovering for services rendered the state by transporting his children to school, provided he transports them the minimum number of days required by law, for which he is entitled to compensation for such service.[37]

In order for a parent to recover for transporting his children to and from school, it is necessary that he first make a contract with the school trustees or produce evidence to show that the authorities have refused to enter into a reasonable agreement with him. An Ohio case illustrates this point very well.[38] The court held that since the parent had asked for compensation and was refused it by the board and the board had failed to furnish transportation, the parent was entitled to recover for his services to the school district. Likewise, if a school board insists on making a contract the requirements of which practically would be impossible for the parent to fulfill, the parent may recover for transporting his children to and from school, as in the case of Schaut v. Joint School District No. 6, Towns of Lena and Little River, Wisconsin.[39] In this case the school directors insisted upon writing into the contract a clause requiring the parent to have his children at school before nine o'clock in the morning. The parent objected to this on the ground that in case of a severe storm it would be impossible for him to meet this obligation, thus making his contract void. Furthermore, in case school authorities make technically illegal arrangements with parents for the transportation of their children, the district is held liable and parents can collect for services rendered. In Indiana[41] a school trustee made arrangements with a parent to transport his children to and from school for a "reasonable sum." The laws of Indiana provide that trustees are not permitted to make such contracts. Nevertheless, the court held that, since the township had already accepted the services of the parent, it was liable for a reasonable value of the services rendered.

On the other hand, if a parent is unable to show that he made or attempted to make any arrangement with the board for transporting his children, he may not recover for such services rendered.[42] A farmer living more than four miles from the nearest school in his district transported his children to a nearer school in an adjoining district. He presented the board of education with a bill for $95, which the board refused to pay. The jury in a justice court gave the plaintiff a verdict for $35. On appeal, the supreme court reversed the decision saying: "The board should have made a valid contract with the plaintiff to transport his children and have made reasonable compensation for such services. . . . . If fathers can take their children to a school other than the one arranged for by the school authorities and collect for the transportation without first having made arrangements with the board it may lead to great confusion in school matters."

A similar decision was reached by a court in South Dakota in the case of Harris v. School District No. 48.[43] In this case a man resided more than two and a half miles from the nearest school in his district. This was far enough from the nearest school for him to be entitled to recover for transporting his children to and from school. Instead of making arrangements with his board of education, he moved his wife and children to an adjoining district where the children attended school six and a half miles from their temporary home. This was three and a half miles farther than they lived from the schoolhouse in their own district. The father brought suit to recover, and the district court gave him a verdict for $66.50 and costs. The board of education appealed, and the decision was reversed.

In cases where the law specifically provides that parents may transport their children to school, it is not necessary that the parents perform the act themselves. All that is required is that the transportation be reasonably safe. One of the older children may legally drive the vehicle.[44]

In the opinion of one court mere neglect on the part of the school authorities to furnish transportation for school children constitutes sufficient ground for the parent to recover for his services rendered in transporting his children to the nearest "properly equipped school within the district by the nearest public or lawfully traveled route." Such service being accepted by the school district, the district is bound under an implied contractual obligation to compensate the parent therefor. Both the majority and dissenting opinions of the court are quoted. In light of the weight of opinion on the other side and the apparent logic of the argument, the writer is of the opinion that the dissenting opinion is better law. The court said:

"It is the manifest duty of the school board to appraise itself of the number of children entitled to conveyance under provision of the laws. . . . . This being true it failed to do its duty. The plaintiff owing a high duty to his children and the state to educate his children was justified in conveying them to the proper school and should be entitled to recover within the limits prescribed by law for such conveyance. . . . . If that school is one where all the elementary branches are taught and is a fit place for his children to attend. . . . . We think it might be shown that the nearest school was not properly equipped nor properly furnished, heated nor lighted. . . . . The plaintiff, having conveyed his children to school, though not the nearest school, we think the plaintiff is entitled to recover in accordance with the laws then in force for the conveyance of his children to the nearest school unless it was shown by competent testimony that such school was not a fit place for his children to attend and in that event to recover for the conveyance of his children between the ages of six and fifteen to the next nearest school—in this case to the school to which he did convey them."[45]

The dissenting opinion of the chief justice and one other judge follows: "The statute nowhere implies that in case of neglect of duty on the part of the school board the school district shall become liable on an implied contract to one who performs services in transporting school children. While the school directors are required to perform their statutory duty and may even be required by mandamus to do so it by no means follows that neglect on the part of the directors to perform their official duty operates as an implied request to some other person to perform service which the school directors should have contracted with someone to perform, nor does it follow that a voluntary performance of such service creates an implied promise on the part of the school district to pay therefor. On the contrary, the great weight of authority seems to sustain the proposition that a public corporation cannot be held liable upon an implied contract for services under such circumstances."

In some states parents may recover for transporting their children who are in certain grades. This has been discussed under the paragraphs on constitutionality.

VI—May Pupils Be Required to Walk to Meet School Busses?

The next question which arises is whether a school board may require pupils to walk a reasonable distance to meet a school transportation bus, and if so what factors are to be taken into consideration. The courts have generally held, both in jurisdictions where transportation is mandatory and where it is optional, with the authorities that pupils can be required to walk a reasonable distance to a bus line established by the board of education.[46] Age and sex are also to be taken into consideration in deciding the distance which a child may be required to walk to meet the school bus. The school au-

[33] School Dist. No. 3, Atchison Co. v. Atzenweiler, 73 P. 927, 67 Kans. 609.
[34] Seiter v. Gelhor et al. District School Board, 209 N. W. 376.
[35] Harkness v. School District No. 3, Ness Co. 175 P. 386.
[36] Harkness v. School Board, 175 P. 386, Park v. McKinney, 245 P. 1021; Watts v. Kelly et al. School Board, 236 P. 827.
[37] Andrews v. School District No. 1, Town of Knapp, Wis., 197 N. W. 813. (See also 5A.)
[38] Sommers v. Putnam Co. Board of Education, 148 N. E. 682.
[39] 210 N. W. 270.
[40] Standingwater v. District No. 2, Kingston, Wis., 197 N. W. 928.
[41] Greenlee v. Newton School Township, 104 N. E. 610, 55 Ind. Appl. 630.
[42] Woods v. School District of Oto, 169 N. W. 108.
[43] Harris v. School District No. 48, 143 N. W. 898, 32 S. D. 544.
[44] Batavia Village Board of Education v. County Board of Education, 19 Ohio Appl. 18.

[45] Eastgate v. Osago School District, 171 N. W. 96.
[46] State ex rel. Solze v. Board of Education, 132 N. E. 16.
State ex rel. Masters v. Beamer et al. Board of Education, 141 N. E. 851.

thorities are not discriminating against those that are required to walk farther than others.[47]

A farmer in South Dakota lived on the side of the Mouse River opposite to that along which a team passed to pick up children from two families a mile farther on. His boys were between the ages of ten and nineteen. The board of education required them to walk between a quarter and a third of a mile, crossing the frozen Mouse River, to meet the team picking up the children on the opposite side of the river. (Transportation was furnished in this case only in the winter.) In order for the team to come to the doorstep of the plaintiff, it would have been necessary for it to have travelled two miles out of the way, thus carrying the other children four miles in the cold or crossing the frozen Mouse River with the danger of breaking through the ice or upsetting. The court's decision is quoted at length as it lays down a number of fundamental principles: "We are firmly of the opinion that the legislative intention was that actual transportation from the door of the house to the door of the schoolhouse should be furnished only so far as reasonably practicable; in other words, that the statute is mandatory and not to be avoided it should be construed as passed by reasonable men and should be interpreted according to its spirit rather than according to its letter. . . . . The purpose of the act is plain and that is the promotion of the cause of education and the making it possible for children to comply with the compulsory-education laws without being subjected unnecessarily to the storms in winter. . . . . It is certainly within the province of the board to take into consideration the sex and age of children to be carried."[48]

The Indiana supreme court has held that, where transportation is furnished in an abandoned district, the children are not entitled to greater conveniences than other children, and drivers are not required to carry each child to and from his house; the practice of picking them up along an established route and delivering them in the afternoon to walk home is proper.[47]

The supreme court of Ohio is of the opinion that, when the statute provides that the board may by resolution designate certain places as "depots" and discretion is exercised, the board must then provide shelter as required in the statute, and it is within the power of the board to use discretion in selecting the points for depots to which children may be required to walk.[49] It is also within the discretion of the board to determine whether it is better for children to cross a railroad track alone to meet a school bus or to drive the bus across the track with the other children.[50]

In computing the distance from the home of a child to the nearest public school of the district, the supreme court of Wisconsin held that, when the distance is to be measured by the nearest traveled highway, this may include a private highway. In this case[1] the children of the plaintiff travelled over a private highway from their home to the public highway. The distance from the point where the children entered the highway to the schoolhouse where they attended was less than the minimum distance for which the parent is allowed compensation by statute. The court held that in computing distance the term "traveled highway" might include a private highway. Unless the private highway referred to is the private lane of the plaintiff, there is some doubt in the writer's mind as to whether or not this is a good decision. It might be that the owner of the land would forbid the use of his private

[47]Lytle v. State ex rel. Smith, 88 N. E. 850, 172 Ind. 582.
[48]State ex rel. Brand v. Mostadt, 148 N. W. 831.
[49]State v. Board of Education, 132 N. E. 16.
[50]State ex rel. Stewart et al. v. Miller, 141 N. E. 60.
[1]Pagel v. School District No. 1, Town of Concord, 199 N. W. 67.

MISS MABELLE McCONNEL ALLEN,
State Superintendent of Public Instruction,
Boise, Idaho.

Miss Allen, who recently became state superintendent of public instruction for the state of Idaho, is a native of the state, where she received her education. Miss Allen is a graduate of the Idaho College, from which she received her degree, and has also taken graduate work at the state university.

The office of state superintendent is elective in the state and has in the main, been held by women incumbents since 1899.

highway and the children might be compelled to walk an unreasonable distance to get to the nearest schoolhouse or school-bus lines.[2]

In Pennsylvania[3] the question arose as to whether or not the vehicle of transportation need be a public carrier where the act says, "electric railway, school conveyance, or other public transportation." The rule of *ejusdem generis* does not require such construction which would make such words "surplusage and school conveyance well known before the act not then being common carriers."

VII—Contracts With Drivers of School Busses

There are questions which arise concerning the legality and binding force of various kinds of contracts entered into between boards of education and drivers of transportation vehicles. Contracts with parents for transporting their own children have been considered under a separate chapter. There remains one question regarding contracts with parents for transporting their children which rightly belongs in this section dealing with contracts in general, namely; are school board members who live long distances from the nearest schoolhouse in their districts entitled to compensation for transporting their own children to and from school? The writer has been able to find but one case of this kind, and it appears that the fraud involved was the real issue in the case, although it will be seen from the opinions expressed by the court that a school-board member could not recover for transporting his children to school, nor could a contract be entered into by anyone for transporting the children of a school-board member. The case quoted is that of School District No. 302, Thurston County v. Libby.[4]

For sometime a Mr. Libby, whose wife was a member of the board of school directors, had been transporting his children and one or two other children to and from school. He presented the board a claim for compensation for this service, payment for which was refused. The court in its review of the evidence said that payment was refused evidently because it was thought to be an illegal contract and claim, in view of the fact that allowing the claim would be paying for service upon a contract in which the community composed of Mr. and Mrs. Libby was pecuniarily interested.

[2]See Notes 1 and 2 under Chapter II.
[3]Commonwealth v. Benton Township, Pa., 120, A. 661.
[4]237, P. 505.

The board of education, thereupon, entered into an agreement with a man to transport the Libby children to and from school for $70 a month. Previously, however, Mr. Libby had made an agreement with the driver to live with him and his wife, the school director, do their chores, and use their team and vehicle for which he was to receive $30 a month; the $70 which he received from the school district was to be turned over to Mr. Libby and his wife for the use of their team and vehicle. This was held by the court to be illegal; first, because the benefits of the contract were secured by the school director; and, second, a contract for hauling children of a school director is unlawful because of the interest of the director therein. On the other hand, in the same state it was held lawful for sons of school directors to be awarded contracts for transporting children to school, in absence of any fraud or interest of the director.[5]

Drivers of vehicles used for transporting children to and from school cannot be entitled to recover under a contract for transporting children when school is closed for an epidemic, according to one court: "The driver's contract is not so far analogous to a teacher's contract that the driver, upon showing readiness to perform during a period when the schools are closed on account of an epidemic, may recover the agreed compensation as upon full performance. . . . . The driver's contract is for personal service, and, without fault of either party, its performance is rendered practically impossible for a period of time, the party thus unable to give or receive performance, is not liable for breach of contract. . . . . Where compensation agreed upon is equivalent of full performance and where there is excusable non-performance for an extended period of time, the service actually rendered under contract is not a substantial performance of the entire contract such as will enable the plaintiff to recover the full compensation."[6]

On the other hand, in Ohio[7] one who enters into a contract entire in its nature, with a board of education for transporting children to and from school during a school year at a stipulated sum payable monthly is entitled to such compensation during a period of suspension of school by the board of education. The court said: "The plaintiff was subject to the daily order of the board of education and could not make any engagement or undertake any service which would interfere with his constant readiness to resume the active discharge of the duties imposed."

In the case of Cashdollar v. Board of Education,[8] the court of appeals held that the fact that compensation under the contract is payable by the month that the temporary order in force for one month does not affect the result. The court pointed out that, to the general rule that a party to a contract is not discharged by subsequent impossibility of performance, there are two exceptions, namely; a change in the law and some action under authority of government. In such cases the promisor is discharged. This does not apply, however, when the impossibility created is only temporary.

Lowest Bidder. Is a board of education bound to award a transportation contract to the lowest bidder, providing he can furnish proper bonds when the school board has advertised for bids? The only two cases which the writer found, agree that the board is entitled to use its own discretion in awarding contracts to bidders. The court said: "There are many elements to

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[5]Cunningham et al. v. Union High School District, 228 R. 855.
[6]Sandry v. Brooklyn School District (S. D.), 182 N. W. 689.
[7]Montgomery v. Board of Education, Liberty Twp., 131 N. E. 497.
[8]12 Ohio Appl. 298.

Child Accounting: Its Achievements and Problems

Arthur B. Moehlman, School of Education, University of Michigan

It is my purpose in this paper to present some of the more notable recent achievements in the field of child accounting and to suggest some of the problems that require solution in the near future. Space will not permit an extended review of the historical background of the child-accounting movement. This phase has already been rather fully covered in several publications.[1] Emphasis will be placed upon the more significant trends in the organization of state systems of child accounting.

For the purposes of this presentation child accounting may be defined as: "the recording of all activities, instructional and executive, that are necessary in the keeping of the essential records of the individual child during his preschool life, his school life, and his postschool life."

1. Child-Accounting Achievements

The outstanding achievements that will be considered and described include the Indiana state system, the Michigan state system, the preliminary organization of the Iowa state system, and the proposed Colorado state system, now being experimentally developed.

The Indiana System

The child-accounting law. The 1921 Indiana assembly passed an act, enlarging earlier compulsory-attendance legislation, which has been called the Child-Accounting Law. This act provided for:

1. The creation of a division of attendance in the state department of public instruction.
2. The provision for a state attendance officer to administer the new division.
3. The mandatory requirement that each county board of education and each city board of education (with a census enumeration of 2,000 or more children) appoint an attendance officer.
4. The attendance officers are state officers, whose qualifications are determined by the state department of public instruction.
5. The attendance officers may be removed by the state department for incompetency and neglect of duty.
6. The attendance division was given the power to design and to require the use of a uniform system of attendance reports and forms needed for the enforcement of the state attendance law.
7. The state law established the basis for the method of accounting and for the type of records by stating in Section 5 "unless otherwise provided herein, every child between the ages of seven and sixteen years shall attend public school or other school taught in the English language" and further in Section 11, "an accurate daily record of all children between the ages of seven and sixteen shall be kept by the teacher of every public school and such record shall at all times be open to the inspection of attendance officials."

Effect of the law. The effect of this law has been to set up a state division of child accounting with full power to devise rules and regulations, under the rather wide powers of the enabling act, and to determine the type and quality of the administrative personnel not only in the state department but also in each of the established attendance districts. Although appointed and paid by the local board of education, these attendance officers are under the direct control and supervision of the state department and are responsible to it for the efficiency with which they carry on their work.

Accomplishments. Under this act, Miss Blanche Merry[2] was appointed state attendance officer in charge of the work of organizing and directing child accounting. The state of Indiana, for administrative purposes, was divided into 134 attendance districts. The first work was to develop a system of uniform rules and reports to check upon the efficiency of enforcement. Up to 1921, attendance operated under a modification of the 1863 Chicago rules under which a child was not marked present until he had formally enrolled in a school and, after three days of consecutive absence, was marked "withdrawn." Miss Merry comments upon this condition[3] as follows: "This method showing a shortage of time lost, raised the per cent of attendance but it was inaccurate. It glossed over the true picture of the school, and consequently was not just to the children, the teachers, or the taxpayers." Under the power of the act of 1921, this practice was immediately stopped. The state department even went further and maintained that, in order to provide for accurate child accounting, a child "should enter school the first day. His absence is charged to the school until he does enter." . . . In the case of transfer within a district, the first school (where the child was in membership) is charged with the absence of the child until the local attendance officer, or the teacher, or the principal, is notified of the transfer. When this is done the new school is charged with the day's absence." In the case of transfers to other attendance districts, "the absence of the child is charged to the first school until the local attendance officer is notified that the child has moved. The new school is to be charged with the absence as soon as the teacher, principal and the parents . . . have been notified that the child must enter school."

The effect of these rulings was to change the old fact-hiding system of records, developed to show a meaningless per cent of attendance, to a strict system of accounting for every child of compulsory school age.

Contact forms, to report transfers to the state department, were furnished attendance officers, and the state maintained a check upon the children through the school-census tabulation sheets. Monthly reports upon attendance, transfers, etc., were required by the state from the attendance officers. As might be expected, the new method of accounting did not work perfectly at first, and today is not functioning completely. The state department is developing the entire system by the piecemeal method, and is educating officers, superintendents, principals, and teachers to new methods and practices at the same time the system is being placed into effect.

The second development under the Indiana law is the provision for appraisal reports in the form of age-grade attendance reports and age nonenrollment reports. The results of this first survey, for all schools, public and nonpublic, have been published in tabulated and graphic form for use by the individual school districts. The publication of this first age-grade survey is to be commended for its completeness and its presentation of facts. The state department has wisely refrained from drawing hard-and-fast conclusions from this preliminary study.

Summary. To anyone familiar with methods and conditions of child accounting in states where no scientific procedures have been developed, the first four years of work by the Indiana state department under the law of 1921 must be considered as remarkable. To shift from the old, haphazard, inaccurate, fact-hiding methods of keeping child records, to a new system, without a long period of education, is a splendid achievement. It becomes more than that when it is further realized that this change was apparently made without a great deal of disturbance. The Indiana state child-accounting system is in a state of evolution and will probably not be complete for a number of years to come. The department has made an excellent start and appears to be pursuing intelligent methods in administering the new law, although not permitting any deviation from the basic purpose of presenting facts. The special feature of this act is the conception of the attendance officer as a state officer, subject to removal for cause by the state department.

The Michigan System

Background. The Michigan state child-accounting procedure was the second in point of legal development. The background of the Michigan law is quite different from that of Indiana. Experimentation in child-accounting technic in Detroit and Wayne county was started under my direction in 1918 and carried on until 1921. In 1921 the Michigan Education Association at the suggestion of the state department of public instruction, and Dean A. S. Whitney, of the School of Education, University of Michigan, considered the advisability of initiating and financing the Detroit and Wayne county experiment upon a state-wide basis. The purpose was to develop a practical procedure which could be administered by the state department of public instruction. A committee was appointed in 1922 to carry on this research.[4] In May, 1923, after a year of study and research, the preliminary report was published and circulated among the school districts in Michigan for criticism and for trial. The results of field trial led to a number of minor changes and the completed technic was published as a bulletin of the Michigan Education Association.[5]

After the technic had proved workable, the Michigan Education Association recommended its adoption as a state-wide procedure to the superintendent of public instruction. The background of the Michigan system was that the initial stimulus came from the field; the experimental work was financed by the Michigan Education Association; the field executives and teachers were generally familiar with the procedure through experimental contact, and by the time the state was ready to enforce the new procedure, the profession was ready for its acceptance.

During the 1923 session of the state legislature, a report was published concerning the conditions of child labor within the state. The superintendent of public instruction was unable to seriously question the published figures because no means existed for checking the data. As a result, at his suggestion, the legislature requested the state superintendent of public instruction to prepare a bill for its consideration which would provide for an accurate fact-finding technic. At the end of 1923 the state teachers' association and the legislature were both concerned and interested in the development of child accounting.

The Michigan Law. The present child-accounting law was introduced in the 1925 legis-

[1] *Child Accounting* (Moehlman) and *A Study of Child-Accounting Records* (Heck).

[2] For more complete statement of achievements see *Child Accounting In Indiana* (Blanche Merry) State of Indiana Department of Public Instruction, Bulletin No. 85, 1926.

[3] Ibid, p. 4.

[4] Committee consisted of Wilford L. Coffey, A. A. Rather, C. D. Dawson, Will L. Lee, and Arthur B. Moehlman, chairman.

[5] Bulletin No. 3, 1924.

lature and passed with a good vote. This bill, prepared by Wilford L. Coffey,[6] covered the general policy of child-accounting procedure, with emphasis upon the school census, and left the development of means of procedure entirely in the hands of the department of public instruction. After the passage of the bill, the superintendent of public instruction adopted the recommendations of the Michigan Education Association and took over the child-accounting technic prepared and approved by it.

Achievements. The enactment of the child-accounting law was followed by a year of education. The state department of public instruction devoted its efforts to training the county superintendents to administrate the new technic. The school of education, University of Michigan, and the state teachers' colleges devoted their efforts to the training of superintendents, principals, and teachers who came for voluntary instruction. By the time the state department was ready to make the new law effective, there was in the state a trained nucleus of approximately 500 individuals, outside of Detroit. The system had been in operation in Detroit and Wayne county since 1920, and approximately 10,000 teachers, principals, and superintendents were familiar with the procedure. When the law became effective in September, 1926, it was possible to start the new system without much more than the usual difficulties surrounding the introduction of anything new.

Briefly the Michigan system provides for a simple system of uniform state-wide child accounting, and the essential records.[7] The technic is based upon a uniform terminology set up designed to produce a fact-finding procedure. The administrative unit is the school district. City districts report directly to the state and other districts clear through the county superintendent's office. The latter official is also directly responsible for the administration of the rural districts. The feature of the system is an individual continuing census of all children of school age, collected and organized by districts, with a duplicate record in the state department of public instruction against which all changes are constantly checked. Transfers within districts, save as they affect nonpublic schools, are handled by the district. Transfers between districts clear through the state department. Provision is made for contacts between schools and districts.

The second part of the system consists in the collection of secondary or derived data for appraisal purposes. Up to the present the state department has confined its efforts to the administration of the primary accounting activities and has attempted to make this as complete as possible. No effort has been made to do anything with the secondary reports. In general the system appears to be working fairly well. There are some weak spots and some minor difficulties which will be encountered in the development and introduction of anything new upon so large a scale, but none of the difficulties encountered are such that they cannot be eliminated by intelligent administration. It requires at least a five-year period to make such change effective and the Michigan system is only in its second year.

Summary. The significant and outstanding fact about the Michigan system of child accounting is the feasibility and practicability of carrying on such activity upon a state-wide basis. Experimental and actual trial indicates that such procedure presents no insurmountable difficulties. It is not working perfectly and it is questionable whether perfection will ever be secured in this or any other procedure. The fact remains that, provided the technic of education and development is successfully carried out, state-wide child accounting is a reasonable possibility. There is one weakness in state child accounting and I do not see how it can be successfully overcome under present administrative conditions. The greatest weakness and difficulty encountered is to secure accurate and timely reports from the rural one-room-school districts. Change of personnel, type of personnel, and caliber of school board are the greatest obstacles. The future, however, holds some cheer in this respect. The rapid development of the consolidated-school district will gradually eliminate this weakness. Until that time comes, the greatest asset the administrator can possess is patience, plus the willingness to spend much more than the necessary time in attempting to solve this problem.

[6]Then deputy superintendent of public instruction; now dean of the College of the City of Detroit.

[7]The technic is completely described in Child Accounting (Moehlman) Courtis Standard Tests, Detroit.

The Proposed Iowa System

The Michigan technic has formed the basis for the two most recent attempts to develop state-wide child accounting. In 1925 the Iowa State Teachers' Association appointed a committee[8] on child accounting with the purpose of developing a uniform state-wide procedure. The first report of this committee was made in November, 1926, and the preliminary report of the committee, in published form,[9] appeared in 1927. This has been submitted to the field for trial, suggestions, and criticisms.

The technic developed tentatively follows in the main the Michigan procedure with the following exceptions. Minor changes have been made in the terminology, but the principle of scientific accounting is clearly stated. No provision is made for a state continuing census but the tentative organization provides largely for county administration. In the minds of the committee this organization is not final. The committee neither *accepts* nor *rejects* the principle of the state continuing census. Upon this point the committee says: "The adoption of this (county administration) method of organization at the outset will permit the more immediate establishment of a uniform child-accounting program for the state. The establishment of a large centralized child-accounting office in the state department would undoubtedly require special legislative action. On the other hand, there is nothing in this plan of organization which precludes this action at any time if the situation seems to warrant it. However, the organization of educational administration in this state seems to most readily gear into the plan of using the county superintendent's office for clearing-house purposes at the outset."[10]

The Iowa system of reports is complete. The problem of reporting was considered as a single problem and the required forms and reports developed in terms of the committee's analysis of the problem. In this respect it resembles the Michigan plan and differs radically from the Indiana plan.

The Proposed Colorado System

The development of child accounting upon a state-wide basis is just in the preliminary stages in Colorado. The committee of the state teachers' association has been working for a year upon the groundwork of a state system. Under the direction of Dr. Hopkins, of the University of Colorado, detailed and careful study has been made of conditions within the state and study has been made of the items which should form the basis of Colorado's child-accounting system. The tangible results of this research is in the form of five master's theses.

[8]Committee consists of C. W. Brown, H. H. Foster, P. A. Lauterbach, H. C. Moehller, A. Samuelson, E. C. Wissler, C. M. Workman, and Dr. Harry A. Greene, chairman.

[9]See *A Uniform Child-Accounting System for the State of Iowa.* Preliminary report of the committees on child accounting, 1927.

[10]Ibid., pp. 35-6.

The committee has not progressed far enough in its work to consider finally the problem of organization and administration, except that present indications point to the county unit, headed up in the state department. Under the present law, all that is probably possible will be the unification of certain child-accounting practices. The ultimate organization of child accounting will require an amendment to the constitution. The ultimate plan of the state committee is to recommend an organization, after experimental trial, which will satisfy the needs of the state for child accounting, and which can be made effective through legal enactment. Whether this action will take the form of special legislation or be a part of the general reorganization program for county and state organization has not been determined.

The state committee plans an early submission of the results of its research to the educational council of the Colorado Educational Association.

Summary. Both the Iowa and Colorado developments in the organization of state child accounting are following a logical procedure. In each case, the first step has been the study of existing conditions. This has been followed by a consideration of the practical aspects of the problem within the state involved, followed by a selection of an experimental organization and technic. The experimental selection will be given thorough trial under field conditions, and modified in terms of the results. The modified procedure will then be placed into use, to meet the particular legal requirements. Throughout this period of development, an organized educational campaign is carried on so that administrators and teachers are prepared for the changes that will be made, in each case. The committees in both states feel that vital changes of this character should be made slowly and effectively. While not specifically stated by either group, it is apparent from the procedure that the program of making child accounting effective will require at least a five-year period.

Child-Accounting Problems

The activity of child accounting, in its scientific aspects, is still very young. Only the surface has been touched in locating and analyzing the problems arising in this field. Many years of research by numerous individuals representing all points of view, are necessary before the problems can be solved. Only four of the many states have up to the present time embarked upon a state-wide program. What the actual conditions are in the other states may be guessed at, but factually, we do not know. The fields of problems requiring study may be divided into three groups in respect to method of approach. These are: (*a*) federal; (*b*) state; and (*c*) local.

a) *Federal.* From the federal standpoint the problems requiring careful investigation and study appear to be those relating to the correlation of state methods of child accounting, particularly in respect to uniformity of accounting terminology. Efforts in this direction will be handicapped somewhat by the lack of uniformity in compulsory-education legislation. This factor should not present an insurmountable obstacle to uniformity but merely serves to indicate some of the difficulties of the problem. The desirability of developing, through careful research, a general model and a form which might be used by states in organizing their educational legislation, is another field of research. It is questionable whether complete uniformity is essential or desirable; but form, methods, and factors, whatever the detailed variation, can be worked out in logical order.

b) *State.* The state is and probably will remain for a long time to come the legal educa-

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The Superintendent of Schools in a City of Five Thousand

Everett C. Hirsch, Rice Lake, Wis.

Many articles have been written regarding the work and qualifications of the city superintendent of schools. Most of these, however, have dealt with the superintendency in the very small school system or in the large city system. Comparatively few have dealt with the particular problems which confront the school executive in a city of about five thousand, and there are many such. The present article is an attempt to set forth the duties, responsibilities, and problems of the superintendent in a city of that size.

The teaching force in such a city consists of from forty to fifty teachers, and usually a high-school principal is employed, but the system is not large enough to warrant the employment of a full-time grade supervisor as is the custom in cities of the next class. Under these conditions the superintendent is relieved of attending to the details of high-school organization and administration, and he puts the emphasis of his personal supervision upon the grades. He is, of course, employed by and is responsible to the board of education. Usually he is charged with the general administration of the schools, and in common practice, serves as a sort of shock absorber in all misunderstandings which may arise over school problems. The duties of the board of education are largely legislative and judicial. The duties of the superintendent of schools are mainly administrative and executive. The relationship existing between him and the board of education should be somewhat analogous to that which exists between the board of directors of any industrial corporation and the manager who is employed to look after the running of the plant. If a board of education cannot place such responsibility upon its superintendent, he should be replaced by a stronger man. The members of the board are all busy people, engrossed in their own affairs, and should be able to consider the superintendent as the school executive and their trusted advisor in all educational matters.

A change has taken place within the past decade regarding the position of superintendent of schools. A few years ago the public in general regarded a man who took up education as a lifework, rather than merely as a stepping stone to enable him to earn money to get into some other work, as a person devoid of ambition; but today the worth of the educator's service is more generally recognized. The status of the work has been raised, and the man who now devotes his life to education must have a period of training comparable in length and quality to that required in other professions. The salaries paid do not yet measure up to the average remuneration of some of the other professions, but they are much better than they used to be. The public has not realized that the schoolman has sacrificed years of time and of earning power in order to get a professional education which in most cases represents an actual investment of many thousands of dollars.

The Duties Summarized

The duties of the superintendent are numerous and varied. Some of the more important duties may be summarized as follows:

1. *To formulate the policies of the school system.* The superintendent must adhere to the wishes of the board of education in regard to the general administration of the schools, and should formulate policies designed to carry on the instruction in accordance with the general policies laid down by the board.

2. *To supervise instruction.* This involves carefully planned supervision of actual classroom work. Haphazard inspection is not sufficient; a definite supervision program must be organized. The weaker teacher especially stands in need of help and sympathetic understanding, and the emphasis of supervision should be given to these members of the force. At the end of each visit, suggestions should be given to the teacher, either orally or in writing, but not in the presence of children, and if advisable a conference should be arranged for a later time at which detailed suggestions may be given and the work carefully reviewed. It is also a part of his duties to rate the teachers already employed and to make recommendations regarding reelection, salary raises, and attendance at summer school.

3. *He must fill out numerous reports by local, state, and national authorities.* No one unfamiliar with this phase of the work realizes the amount of effort expended in filling out reports, or the amount of detailed information demanded. These reports must be absolutely accurate before leaving the superintendent's office, because they are checked and rechecked, and any error which may occur is immediately referred back to him.

4. *He must have some knowledge of school architecture and school building laws.* Many a school building presents a beautiful outward appearance and a dark and unsatisfactory interior arrangement, because practical advice which the superintendent could have given was not incorporated in the plans. More and more architects are relying upon the advice of schoolmen so far as arrangement is concerned.

5. *He must call, preside at, and guide the procedure of teachers' meetings.*

6. *He should be acquainted with the best and most economical brands of general supplies.* Unless the superintendent or some members of the board have such knowledge, they are buying blindly and offering an invitation to be swindled by the first smooth salesman who comes along. The superintendent should investigate and advise regarding expenditures for major items of equipment, but should not be required to carry sole responsibility for such purchases.

7. *He must see that teachers are supplied with the necessary books and equipment* which are the working tools of their profession, purchase and distribute routine supplies, and at the same time take care that expenditures for such supplies are kept at a minimum.

8. *He must be sure that the course of study in both high school and grades is kept up to date;* that it is alive, and that it not only conforms to the requirements of the state department, but that it meets the needs of the community in which it is used.

Keeping Abreast of Educational Progress

9. *He must keep abreast of the professional literature of education* so that he can at all times be informed upon the latest methods of instruction and of school administration, and be able to give teachers help or in certain cases refer them to works from which they may obtain help.

10. *He must study and be acquainted with the content of the leading textbooks in each subject,* and within reasonable limits see that the children in the schools are supplied with textbooks which are authoritative, up to date, and adapted to the needs and capacity of the pupils.

11. *The superintendent should attend educational meetings* for the purpose of meeting and hearing leaders of the profession and bring back to his community the inspiration thus secured and the knowledge gained of the current worth-while developments in the educational field.

12. *He should give courteous attention to all problems and complaints which are brought to him.* In most cases, misunderstanding lies at the base of the situation, and this usually may be cleared up by patient and tactful explanation. It is not necessary, however, for him to meekly accept abuse or permit his time to be wasted.

13. *The superintendent should be ready at all times to assist teachers with the problems which arise in their work.* His viewpoint should be broader, and his more varied experience should give him a richer background from which to draw in seeking solutions for these problems.

14. *Children have a right to bring their problems to the superintendent in certain cases,* and most men deem it a privilege to aid them in finding solutions.

15. *He must keep a list of names of substitute teachers* who are available, a record of the dates and length of employment of each and the amount of remuneration due. He must also make out the monthly payroll and see that it is in the hands of the proper official in time so that each payroll may be met promptly.

16. *It is a part of his work to formulate the duties of school janitors and other special employees,* to supervise such duties, and to make recommendations to the board of education regarding the "hiring and firing" of all such employees.

17. *He must be the leader in the organization of testing programs,* including both standard subject tests and intelligence tests, and must base school policies upon the results obtained, placing special emphasis where it is most needed.

18. *He should have a fair knowledge of the school law of his state* and be able to advise the board of education as to the legal aspects of various problems which arise from time to time in every school system.

19. *He must keep in constant touch with attendance in the various schools,* check up on children who are habitually absent or tardy, notify parents of such delinquents, and if necessary, cause action to be entered against them.

20. *He must see that all playgrounds are adequately supervised,* make regulations regarding use of the playgrounds and regarding the use of playground apparatus so that all children will have an equal opportunity to use the apparatus with a minimum amount of friction between teachers and between pupil groups.

21. *He must pass upon all special promotions or demotions,* and be ready at any time to defend his decision in such matters against criticism which may develop.

Community Contacts

22. *He must be ready to respond to calls to speak before parent-teacher associations, clubs, and other civic groups,* and it is a major duty to see that all worth-while movements in the schools get adequate newspaper publicity. Every subordinate should be given full credit for whatever she does, and the superintendent may be sure that he will eventually get whatever credit he deserves.

23. *He must attend high-school gatherings and take a reasonable part in the activities thereof.* A superintendent who takes himself too seriously will not be happy in the community.

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The Boston Meeting of the Department of Superintendence

An unusually good program for the meeting of the Department of Superintendence, to be held in Boston, February 25 to March 1, is promised by Joseph M. Gwinn, superintendent of schools of San Francisco, and president of the department.

A large part of the program will be devoted to questions concerning secondary education. This is appropriate as the 1928 yearbook of the department is on the development of the high-school curriculum. At the opening meeting, the Hon. Alvin T. Fuller, governor of Massachusetts; Dr. A. Lawrence Lowell, president of Harvard University; Mrs. A. H. Reeve, president of the National Congress of Parents and Teachers; and Mr. J. E. Burke, superintendent of schools, Boston, will discuss high-school work.

The principal phases of secondary education to be discussed at various meetings include the program of education for the adolescent youth, variations in secondary-school curriculums, differentiating and expanding the secondary curriculums, counseling and guidance for adolescent boys and girls, curriculum problems of the small high school, and questions of administration, management, and teaching.

A feature at one of the general evening meetings, following an address by President W. H. P. Faunce of Brown University, is a master film entitled "Education in American Schools," made up of selected films showing actual school-work in various parts of the United States.

At one meeting the relation of higher education to public education will be discussed by President James R. Angell of Yale University, President L. D. Coffman of the University of Minnesota, and Superintendent Susan M. Dorsey of Los Angeles.

Wednesday afternoon, February 29, no meetings will be held as special historical trips have been arranged to points of interest in and about Boston. These include trips to Plymouth, Lexington, Concord, Bunker Hill, Harvard University, and other places.

Meeting in Boston at the same time with the department are the usual affiliated organizations. The Department of Elementary-School Principals, the National Association of Secondary-School Principals, and the Department of Rural Education will meet during the convention of the department.

The professional and commercial exhibits will be conducted on a larger scale than at any previous meeting of the department, with more than two hundred organizations participating. The exhibits will occupy three floors of the Mechanics Building and will include displays and demonstrations of modern school equipment and teaching material. The exhibit hall will be open for inspection beginning Saturday, February 25.

A feature of the convention will be the Living Exhibits which will take the form of actual teaching demonstrations by teachers and pupils from the schools of Boston and vicinity. These will be operated on regular schedules in Paul Revere Hall, in the Mechanics Building. Motion pictures from films loaned by state and city school systems will be shown in theaters located on the lower floor of the exhibit hall.

The following is the tentative program which has been arranged for the meeting:

THE PROGRAM

Monday Morning, February 27

Greetings—Hon. Malcohm E. Nichols, mayor of Boston.

Response—Mr. Milton C. Potter, superintendent of schools, Milwaukee, Wis.

Monday Afternoon, February 27

Variations Found in Secondary-School Curriculums—Mr. John J. Maddox, St. Louis, Mo.

Differentiating and Expanding the Secondary-School Curriculums—Mr. Thomas R. Cole, superintendent of schools, Seattle, Wis.

Counseling and Guidance for Adolescent Boys and Girls—Mr. George N. Child, superintendent of schools, Salt Lake City, Utah.

Curriculum Problems of the Small High School—Mr. A. T. Allen, superintendent of schools, Raleigh, N. C.

Senior-High-School Teacher—Mr. E. B. Cauthorn, Dallas, Tex.

The Junior College—Mr. R. J. Leonard, Teachers College, Columbia University.

The School and Social Agencies—Mr. Nicholas Bauer, superintendent of schools, New Orleans, La.

Adapting Elementary Schools in Individual Differences of Pupils—Mr. R. G. Jones, superintendent of schools, Cleveland, Ohio.

Group and Creative Activities in Education—Mr. Charles S. Meek, superintendent of schools, Toledo, Ohio.

Better Understanding of Creative Activities—Miss Lucy Gage, Peabody College for Teachers, Nashville, Tenn.

Monday Evening, February 27

The Use and Abuse of Democracy in Education—Pres. W. H. P. Faunce of Brown University, Providence, R. I.

The Inter-American Ideals—Pres. Thomas E. Benner of the University of Porto Rico.

Tuesday Morning, February 28

Progressive Tendencies with Respect to Sources of School Revenues—Mr. Fletcher H. Swift, University of California, Berkeley.

The Equalizing Principle in State School Support—Mr. Albert S. Cook, state superintendent of schools, Baltimore, Md.

Reports of committees on articulation of educational units, supervision, educational research, relation of boards of education and administrative officers, and auditing.

Tuesday Afternoon, February 28

Sectional Meeting of State Departments of Education. Topic: Making the Schools Public Schools. Mr. Ernest W. Butterfield, state commissioner of education, Concord, N. H., presiding.

Sectional Meeting of County Superintendents. Topic: Equal Opportunity for the County Child. Miss Kate V. Wofford, Laurens, S. C., presiding.

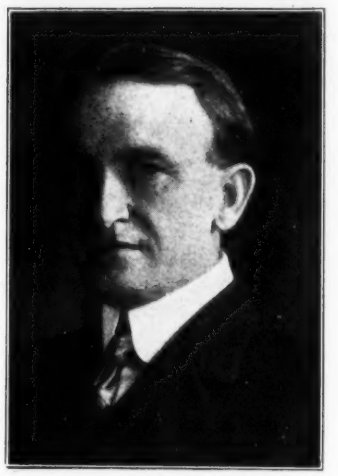
Sectional Meeting of Superintendents in Cities of Less Than 10,000 Population. Topic: Keeping the People Informed, Improvement of Teachers, and Adapting Courses of Study and Programs in Education. Mr. Philip H. Kimball, superintendent of schools, Brunswick, Me., presiding.

Sectional Meeting of Superintendents in Cities of 10,000 to 100,000 Population. Topic: Appropriate Forms of Publicity for Promoting the Best Interests of City-School Systems. Mr. S. E. Weber, superintendent of schools, Charleston, W. Va., presiding.

Sectional Meeting of Superintendents in Cities of 100,000 to 250,000 Population. Topic: Supplementary Education. Mr. Carroll R. Reed, superintendent of schools, Bridgeport, Conn., presiding.

Sectional Meeting of Superintendents in Cities of 250,000 and More Population. Topic: The Improvement of Teachers in Service. Mr. David E. Weglein, superintendent of schools, Baltimore, Md., presiding.

Sectional Meeting of Assistant and District Superintendents of Schools. Topic: The Job of the City Assistant or District Superintendent. Mr. Byron W. Hartley, superintendent of schools, Louisville, Ky., presiding.



SUPT. J. M. GWINN,
San Francisco, Calif.,
President, Department of Superintendence.

Sectional Meeting of Business Managers: Topic: Some Administrative Problems Relating to School Supplies. Mr. Byron W. Hartley, superintendent of schools, Louisville, Ky., presiding.

Sectional Meeting of the Educational Research Association and the National Society of College Teachers of Education. Dean William Webb of the School of Education, University of California, presiding.

Secondary-School Supervision from the Viewpoint of the Principal—Mr. F. L. Bacon, principal Newton High School, Newtonville, Mass.

Secondary-School Supervision from the Standpoint of the Superintendent—Mr. John J. Maddox, superintendent of schools, St. Louis, Mo.

Secondary-School Supervision from the Standpoint of the Teacher—Miss Cornelia Adair, Richmond, Va.

Should Supervision be Made Scientific?—Mr. Charles H. Judd, director of the school of education, University of Chicago.

Wednesday Morning, February 29

What is the Work of the Superintendent of Schools?—Mr. W. W. Charters, professor of education, University of Chicago.

The Qualifications of the Professional Superintendent of Schools—Mr. John H. Beveridge, superintendent of schools, Omaha, Nebr.

The Relation of the Superintendent of Schools to Lay Control—Mr. E. C. Hartwell superintendent of schools, Buffalo, N. Y.

The Professional Training of School Executives—Prof. George D. Strayer, Teachers College, Columbia University, New York, N. Y.

The Training of Superintendents of Schools While in Service—Mr. A. B. Meredith, state commissioner of education, Hartford, Conn.

Thursday Morning, March 1

The Endowed Institution of Higher Education, Its Relation to Public Education—Pres. James R. Angell of Yale University, New Haven, Conn.

The State University, It Relation to Public Education—Mrs. Susan M. Dorsey, superintendent of schools, Los Angeles, Calif.

Education and the State—Pres. Stratton D. Brooks of the University of Missouri, Columbia, Mo.

Progressive Education in England — Miss Beatrice Ensor, London, England.

The Debt of New England to the South and the West—Mr. A. E. Winship, Boston, Mass.

A SPECIAL INVITATION

Addressed to Readers of The American School Board Journal

SAN FRANCISCO PUBLIC SCHOOLS
OFFICE OF THE SUPERINTENDENT
CITY HALL

January 11, 1928.

The Boston meeting of the Department of Superintendence of the National Education Association and several other national educational organizations, February 25th to March 1st, will provide a most attractive program for many classes of educational workers.

Boston and environs afford many attractions to teachers and school superintendents.

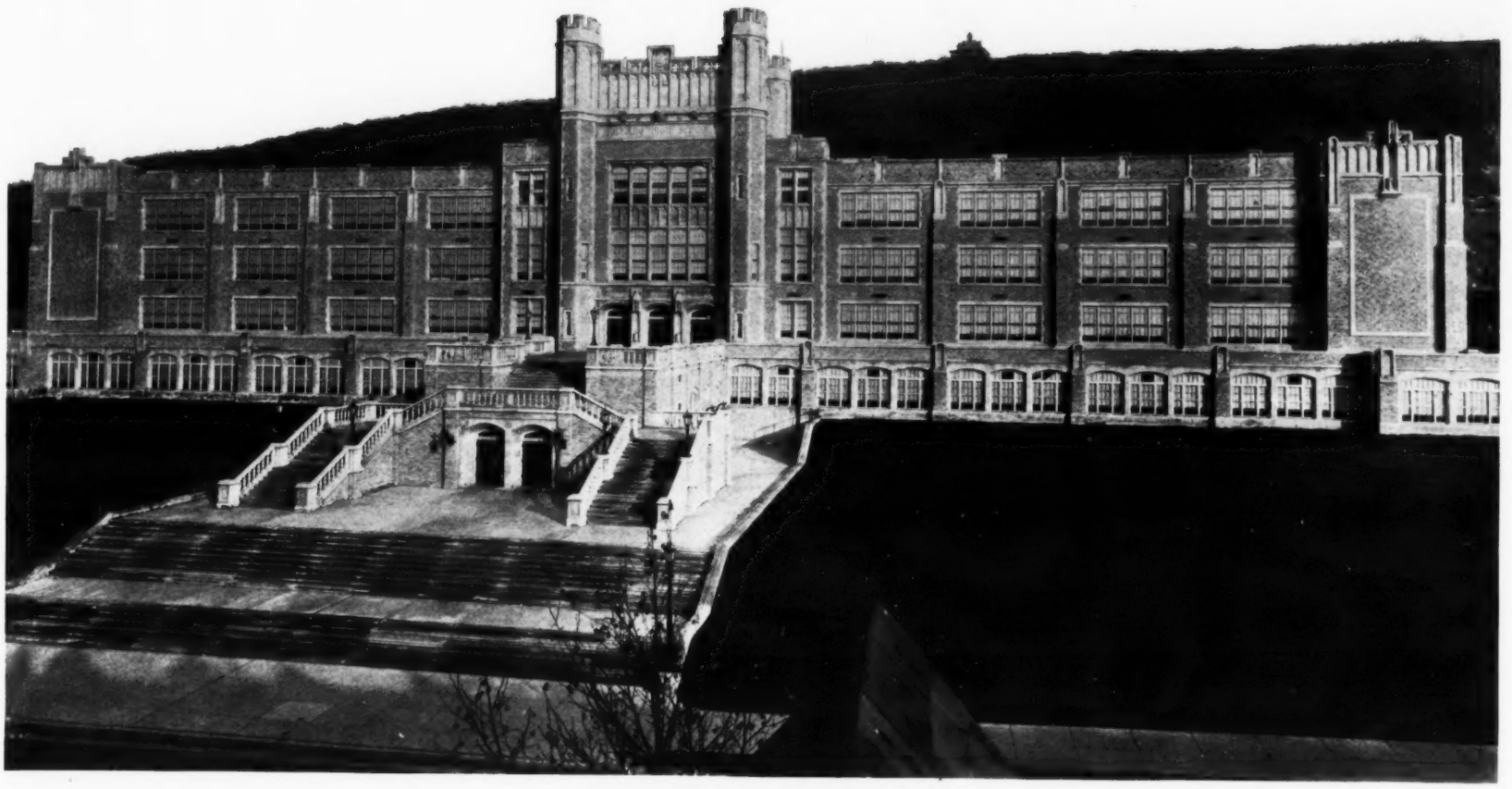
The Department of Superintendence will feature secondary education in its Year Book and in several of the programs. The relation between public education and higher education will be given attention and bring to the program several presidents of great American universities. The job of the school superintendent and the job of the assistant superintendent of schools will be given consideration on the program. School costs have an important place on one of the general programs.

The exhibits are unusually attractive. The schools of Boston and neighboring cities will provide continuous demonstrations of school activities with pupils and teachers. Films of school activities from many cities and states in the country will be shown for several hours each day.

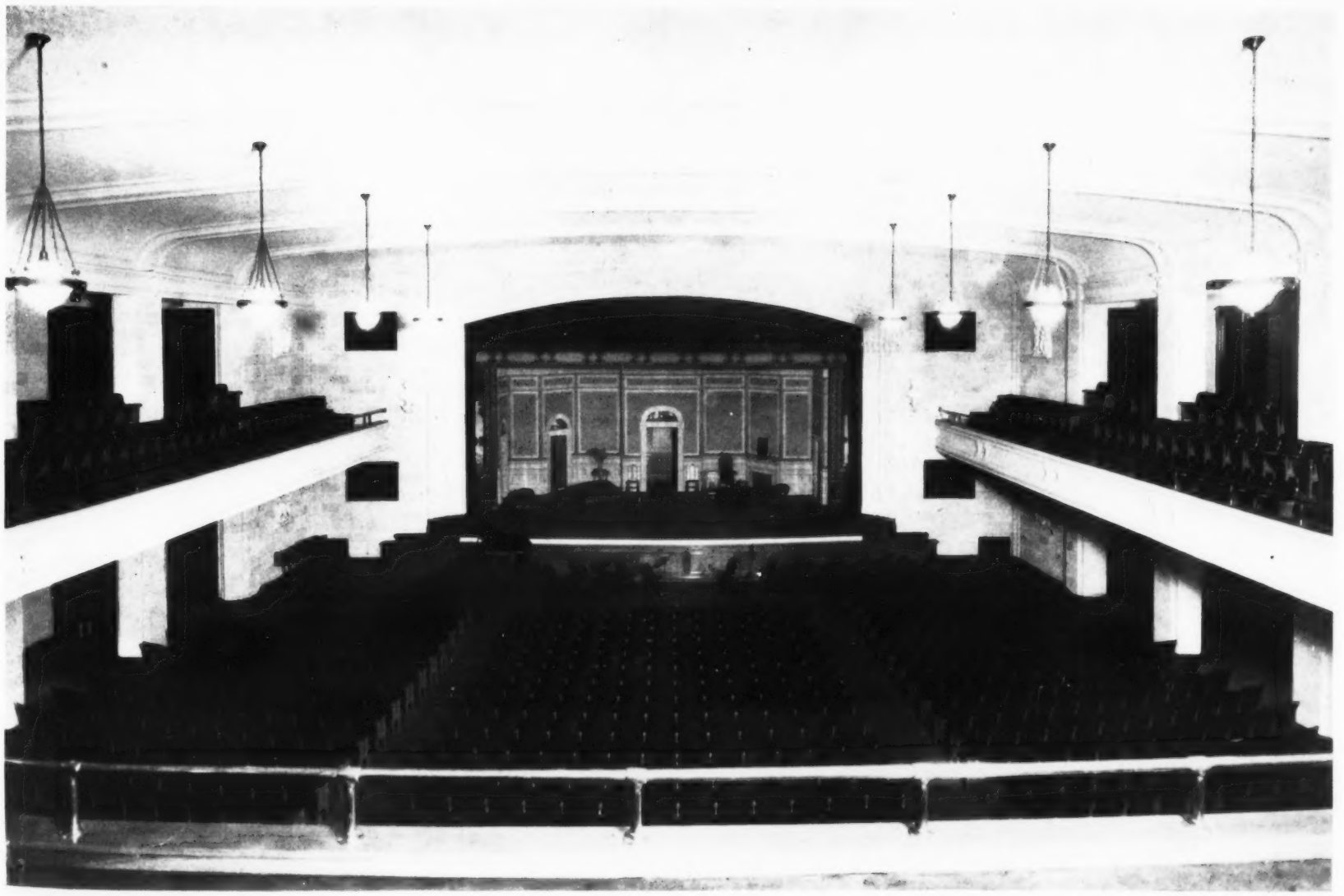
The advance hotel reservations indicate an attendance equal to if not greater than at any other annual meeting of the Department of Superintendence. Boston has ample accommodations for all who may wish to attend.

As President of the Department of Superintendence, and in view of the excellent program that has been prepared and the entertainment so generously provided by Boston, and New England, I am extending an invitation to all school superintendents and others engaged in school administration and supervision to be in attendance at the Boston meeting.

J. M. Gwinn,
President Department of Superintendence,
National Education Association.

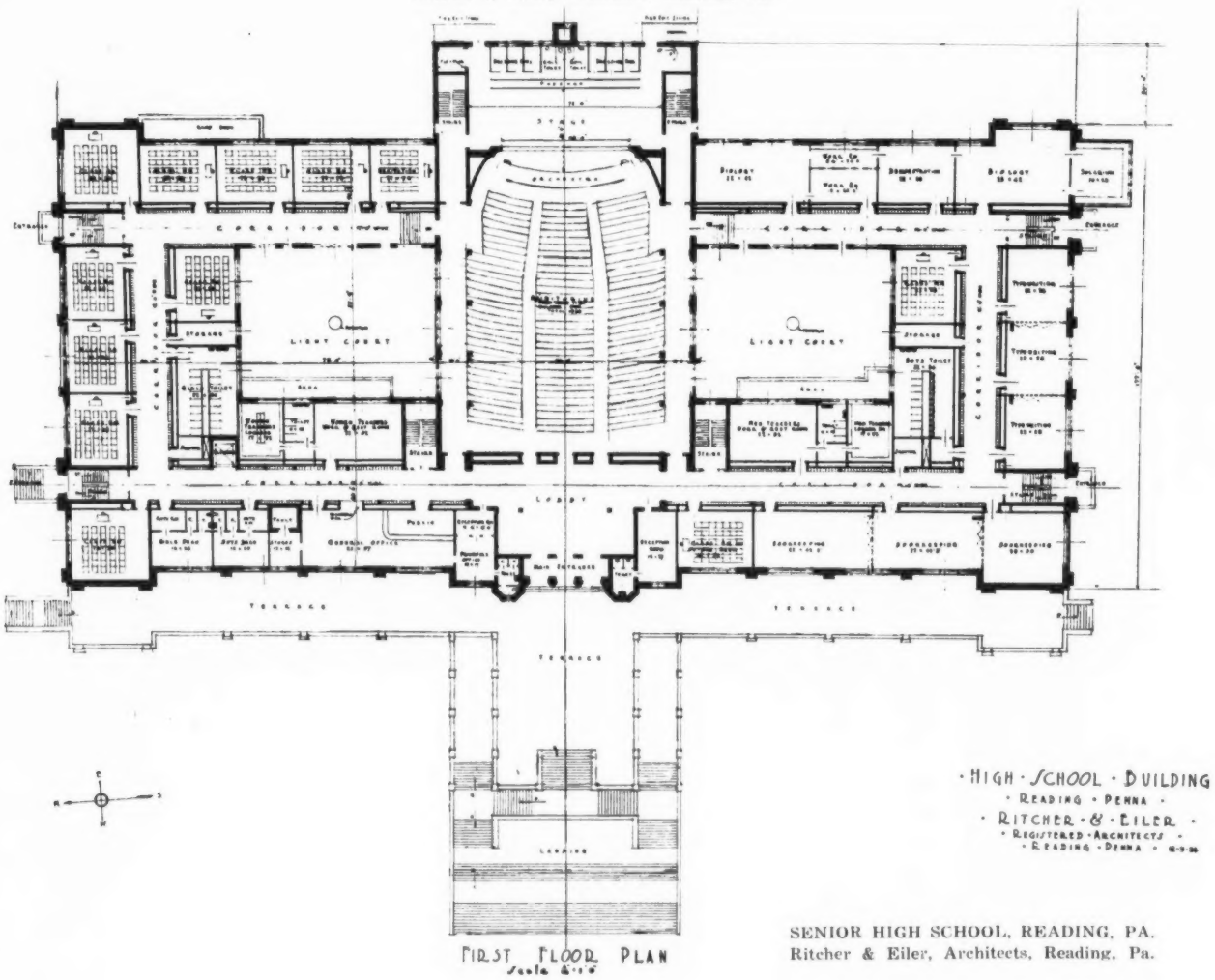


SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.



MAIN AUDITORIUM,
SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.

LOBBY,
SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.



FIRST FLOOR PLAN

SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.

INTERIOR VIEWS OF SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.
TOP: Drawing Room and Laboratory; CENTER: Music Room and Main Office; BOTTOM: Woodworking Shop and Machine Shop.

THE READING SCHOOL-BUILDING PROGRAM

Landis Tanger, Superintendent of Schools, Reading, Pennsylvania

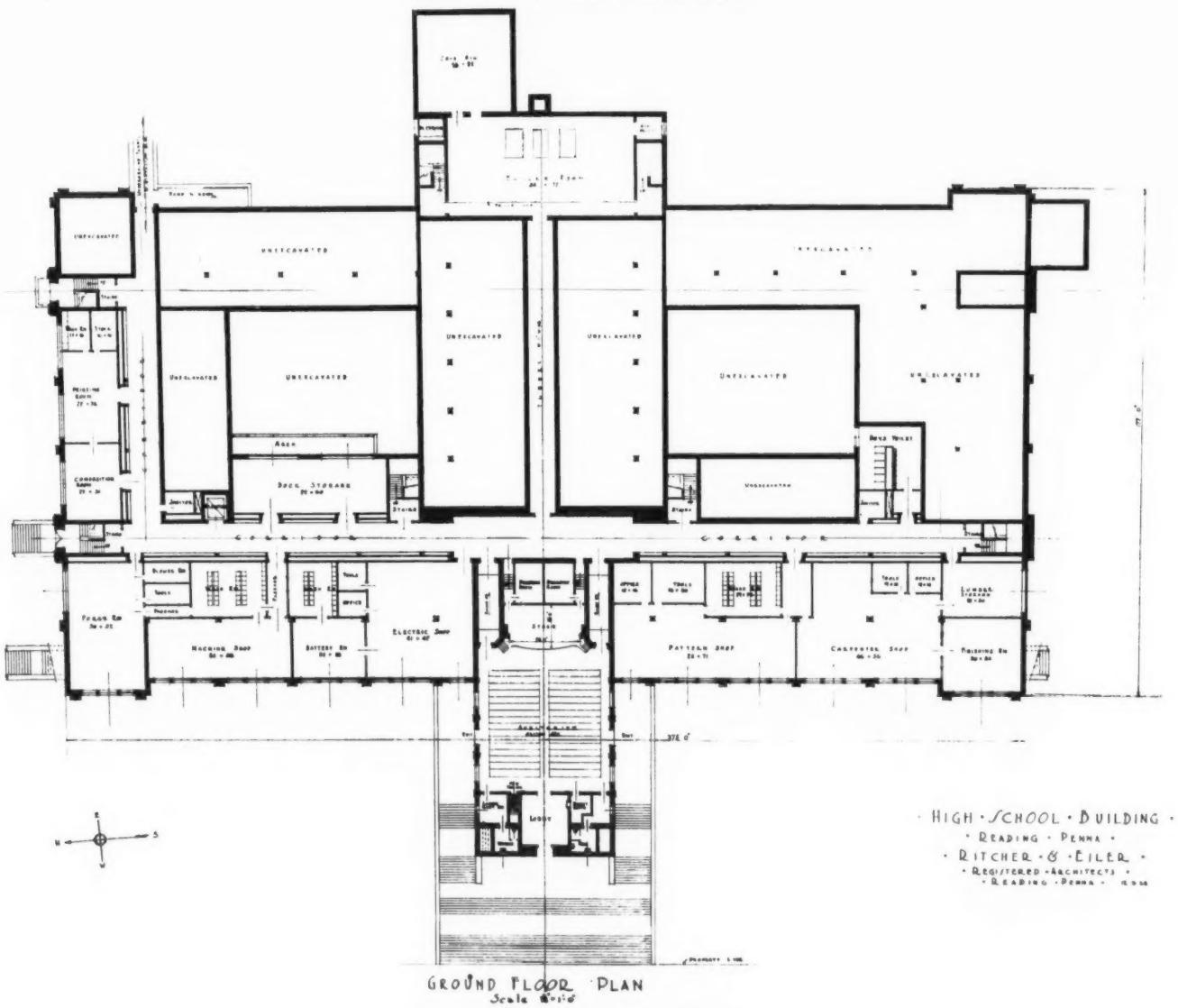
The school-building program for the school district of Reading, Pennsylvania, forecasts adequate schoolhousing facilities for the city. It provides for immediate and remote needs—a seat, full time, for every child attending the public schools and facilities adapted to meet the demands of the changing conception of education.

The public-school system dates from 1836 when the population of the city was approximately 6,500. At present the population of the city is 114,000. From 1836 until 1911 the board of school control was composed of four representatives from each ward. By 1911 there were sixteen wards in the city. The result of the ward-unit of control was the erection of many small school buildings to meet the growing demands for more schools. Since 1911 nine members constitute the board of school directors who are elected at large. The abandonment of ward control for central control brought with it the problem of adjusting the entire school plant to meet the growing demands for schools. At the close of the world war all the schools were crowded. Many of the buildings were antiquated and inadequate. All departments were operating under handicaps. To meet the problem, a study of the entire school plant was necessary. On December 4, 1922, the Pennsylvania state department of public instruction accepted the invitation of the Reading board of school directors to make a building-plant survey for the district. The survey was made with the assistance of the district superintendent of schools and his staff. After several preliminary reports of the survey committee, the board adopted its recommendations November 4, 1923. On the basis of the survey the citizens voted to increase the bonded indebtedness of the district $3,500,000. With this source of revenue at hand, the board launched the building program, which comprised the purchase of land and the erection of elementary-grade and secondary-school buildings and a building for a museum and art gallery.

Elementary-Grade Buildings

Since 1922, five modern fireproof grade-school buildings have been erected. Each of these buildings is so planned that extensions may be added. Four of them are located upon plots of ground which provide more than the accepted standard playground area. At present a 30-classroom elementary building is in process of construction in

LIBRARY,
SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.



GROUND FLOOR PLAN
Scale 1/16" = 1'-0"

SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.

the congested southwestern section of the city. With the completion of this building, which is scheduled for opening September 4, 1928, a total of 82 standard classrooms will have replaced 57 antiquated and inadequate classrooms in portables and old buildings scheduled for abandonment.

These new buildings are provided with offices, health rooms, kindergartens, library rooms, gymnasiums with showers and lockers, and storage space which give opportunity to organize the schools on a more liberal basis.

SECONDARY-SCHOOL BUILDINGS

Junior High Schools

In 1922, the board began the erection of the Northeast Junior High School in a rapidly growing section of the city. This building is located upon a plot of ground that occupies an entire city block, and has a capacity to accommodate 1,200 pupils. Upon the roof of this building is placed an open-air school with a capacity of 60 pupils.

The Southern Junior High School, completed in 1925, located in an older and more congested section of the city, while it has limited facilities for out-door activity, is so constructed that a playground may be operated on its roof. The capacity of this building will accommodate 1,300 pupils. The following table gives the salient features of the Northeast and Southern junior high schools:

	Northeast	Southern
Classrooms—academic	25	28
Classrooms—commercial	3	2
Classrooms—science	2	3
Classrooms—music	2	2
Library	1	1
Science laboratory	1	1
Foods laboratory	2	2
Clothing laboratory	2	2
Laundry	..	1
Model apartment	1	1
Art	1	1
Mechanical drawing	1	1
Woodshop	2	1
Millroom	1	1
Electric shop	1	1
Machine and metal shop	1	1
Printshop	..	1
Gymnasium, shower, and locker rooms	2	2
Faculty rooms	1	1
Editorial rooms	1	1
Students' lavatories	6	6
Cafeterias	1	1
Auditoriums	1	1
Bicycle rooms	2	..
Classrooms—open-air	2	..
Dining rooms—open-air	1	..
Kitchen—open-air	1	..
Health rooms	1	1
Passenger elevators	1	1
Freight elevators	1	1
Office—administration	1	1
Office—principal	1	1

Senior High School

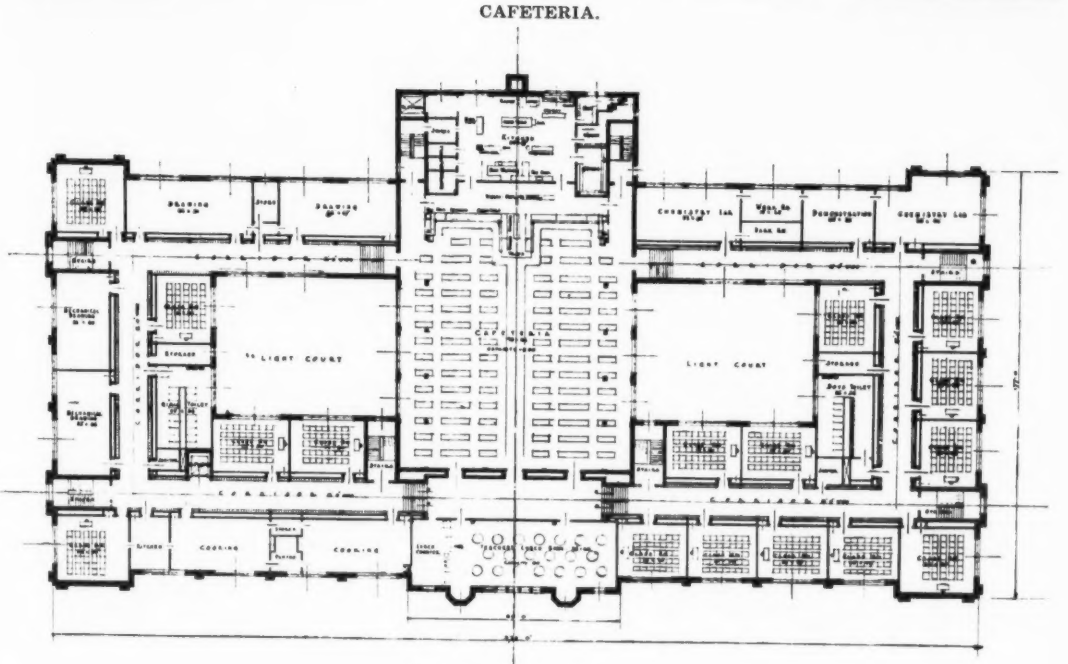
The largest project in the entire building program is the purchase of a plot of ground and the erection of the Reading High School, with a capacity to accommodate 1,800 pupils. This building is located four blocks from the center of high-school population. The placement of the building upon the plot admits of extensions for shops and gymnasiums. The setting is such that a community athletic field can be laid out adjoining it. The location of this building is outstanding. The simplicity of the building and its architectural features with a beautiful background of native forests on Mount Penn makes it most attractive. It is removed from the noise, smoke, dust, and vibration of industry and traffic, and is well adapted to meet the high-school needs of the city. The following are its salient features:

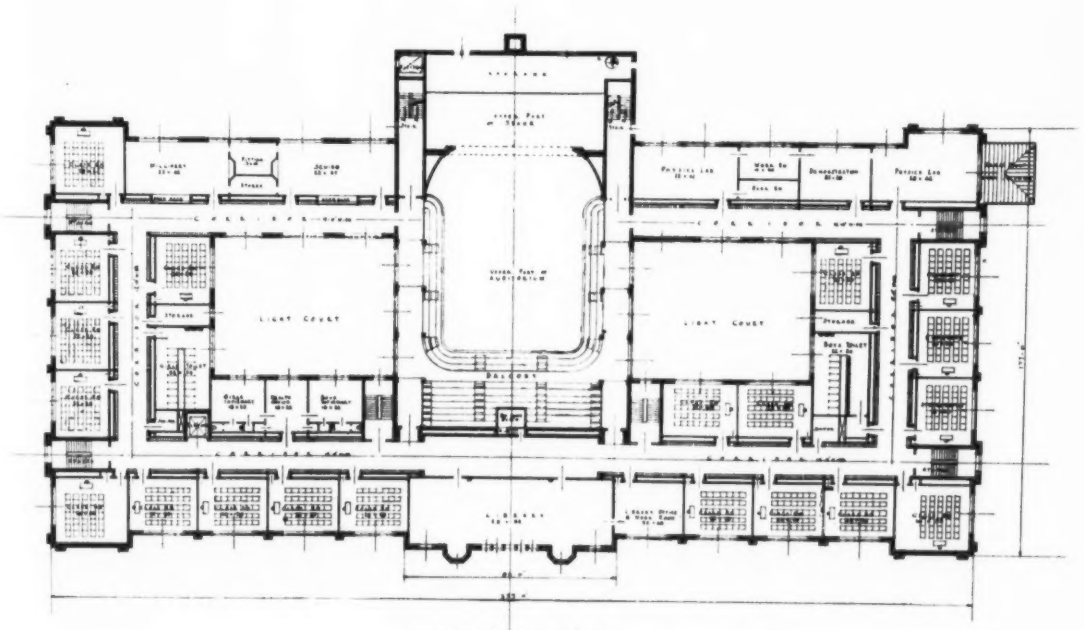
61 Classrooms, including 3 science demonstration rooms
1 Solarium
6 Science laboratories
4 Home economics laboratories
2 Art-rooms—1 storage room
2 Mechanical-drawing rooms
4 Shops
2 Council rooms—lavatory and locker rooms adjoining each
1 Medical dispensary, including office and room for boys and girls
7 Lavatories for students
1 Main office and 3 private offices for executive force, stockroom, and vault
4 Stockrooms for books and supplies
2 Auditoriums, 1 large with balcony, 1,700 capacity; and one under main entrance, 300 capacity
1 Music room
2 Cafeterias, one students', 1,000 capacity; 1 faculty, 80 capacity
1 Library—120 students
2 Standard gymnasiums, shower and locker rooms.

Since 1882 the boys and girls of the city attended separate high schools. The erection of this building has simplified the high-school organization.

The erection of the junior and senior high schools has further relieved crowded conditions in

CAFETERIA.





INTERIOR VIEW AND FLOOR PLANS OF THE SENIOR HIGH SCHOOL, READING, PA.
Ritcher & Eiler, Architects, Reading, Pa.

GLENSIDE SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.

the grade schools. With the completion of the grade building that is now in process of construction the city of Reading will have added 259 classrooms of standard size and abandoned 118 old and inadequate rooms.

All the buildings mentioned above are equipped with modern heating and ventilating systems. Lavatories are provided on each floor, and all rooms are equipped for electric lighting and for the operation of stereopticons. Movable classroom furniture is installed in all the new buildings.

During the past five years the building program has progressed to the extent that crowded conditions have been relieved for 15,000 of the 20,000 children enrolled.

Museum and Art Gallery

Unique among the features of the Reading school plant is a modern museum and art gallery, used as a center of visual education. It is open to the public at all times as well as to the schools. In the campaign to increase the bonded indebtedness to improve the school plant, provision was made to erect and equip a building for this purpose. The Reading museum and art gallery is located in a beautiful building in a large attractive park near the western limits of the city.

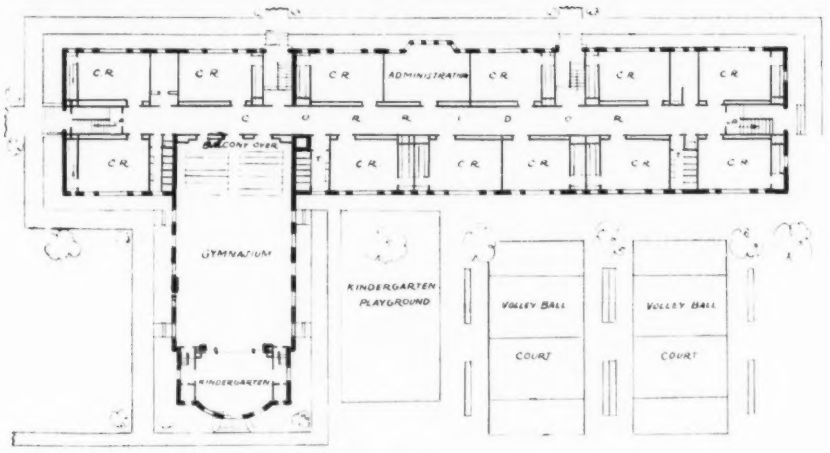
In addition to the buildings mentioned the board is pursuing a remodeling program in which it contemplates the adaptation of some of the older buildings to modern standards. To meet the future needs for building, the board has purchased three large plots of ground for the location of two elementary-grade buildings and a junior-high-school building. To date the needs for schoolhouses in Reading has been reasonably well satisfied. The problem of the future is to give careful study to the needs that are developing in the newer sections and the replacement of a number of smaller buildings by larger ones in the older sections of the city.

THE NORTHMONT SCHOOL
Frederick A. Muhlenberg, Architect, Reading, Pennsylvania

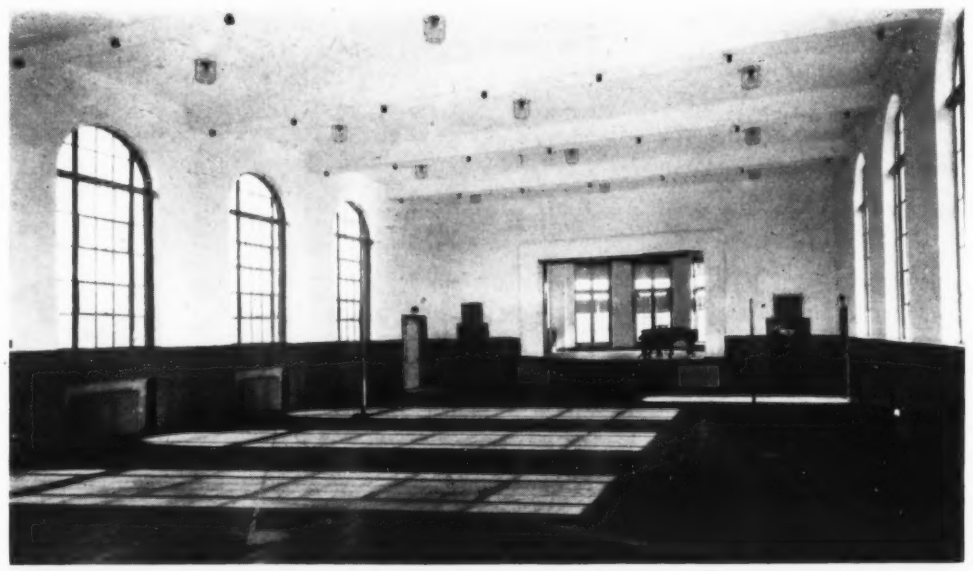
The Northmont School is the first trade school to be erected from the school loan and is built on a small, flat lot in a suburban community. The building is of fireproof construction, with special smokeproof stairways. The stairways are of iron, cement filled, and are cut off frou the corridors by means of Kalamein and wire-glass panels.

The construction is concrete beam and slab with hung ceilings, the exterior is of red Harvard brick backed with tile and terra cotta. The floors are concrete covered with maple; in the corridors the floors are covered with linoleum. The windows are of the reversible double-hung type.

The building contains four classrooms and an assembly room, with provisions for enlargement to a sixteen-room building at any future date. There are also a teachers' room, a principal's room, a small library, and a medical inspector's room. The classrooms have natural slate blackboards on two sides, with corkboard bulletin board for schoolwork which it is desired to preserve. The walls and ceilings are painted with lead oil and paint.

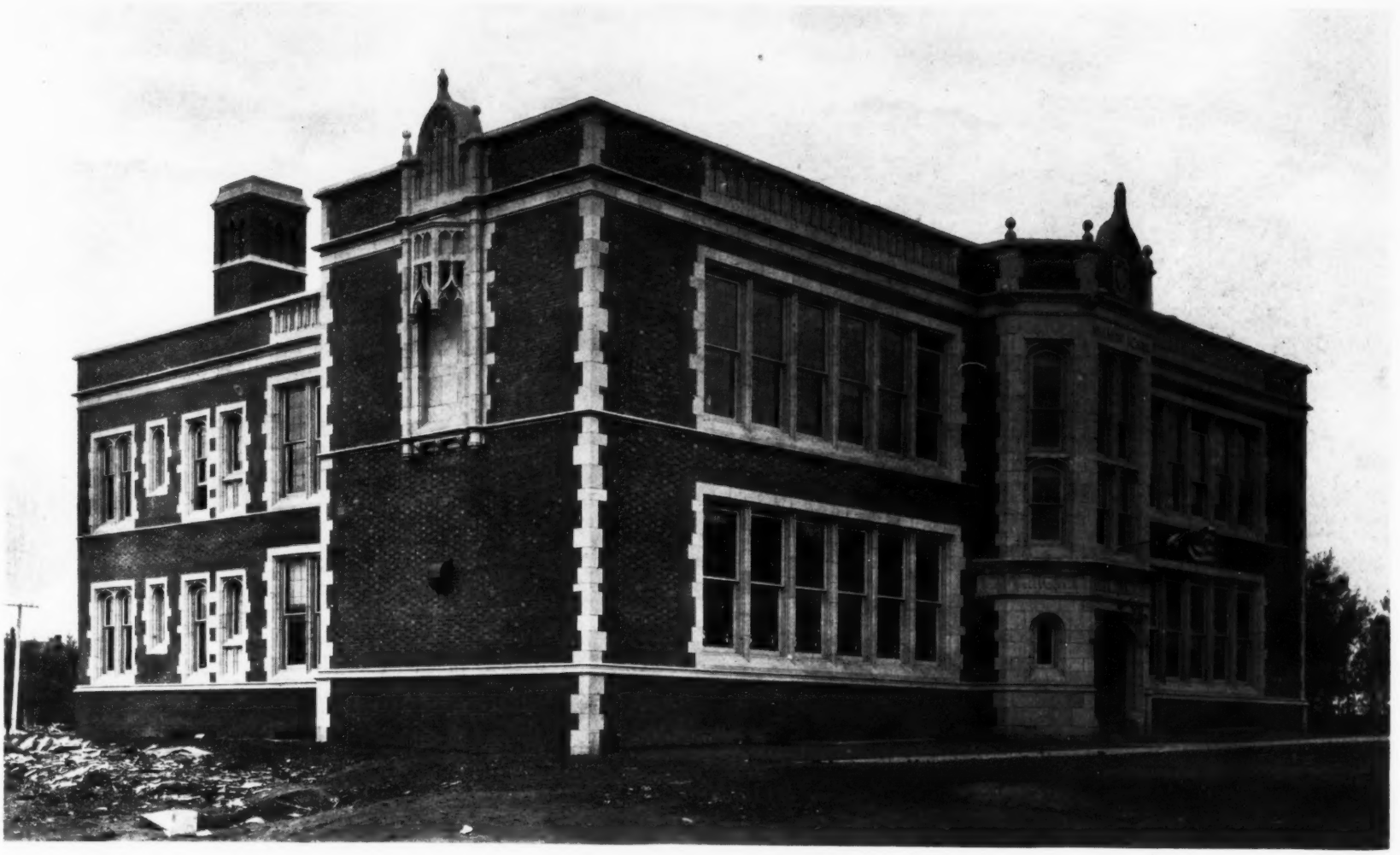


GENERAL PLAN.

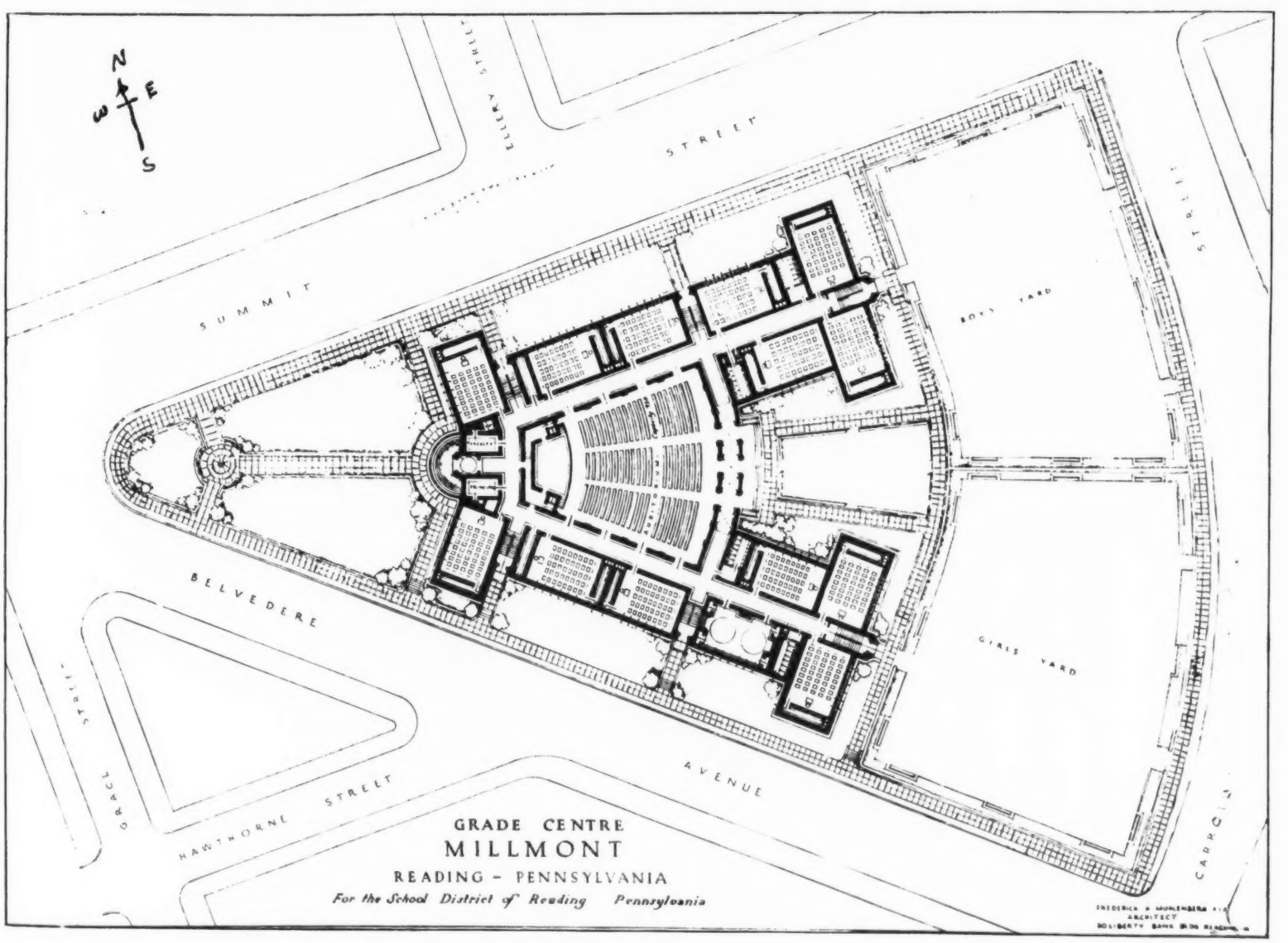


GYMNASIUM-AUDITORIUM.
GLENSIDE SCHOOL, READING, PA. Frederick A. Muhlenberg, Architect, Reading, Pa.

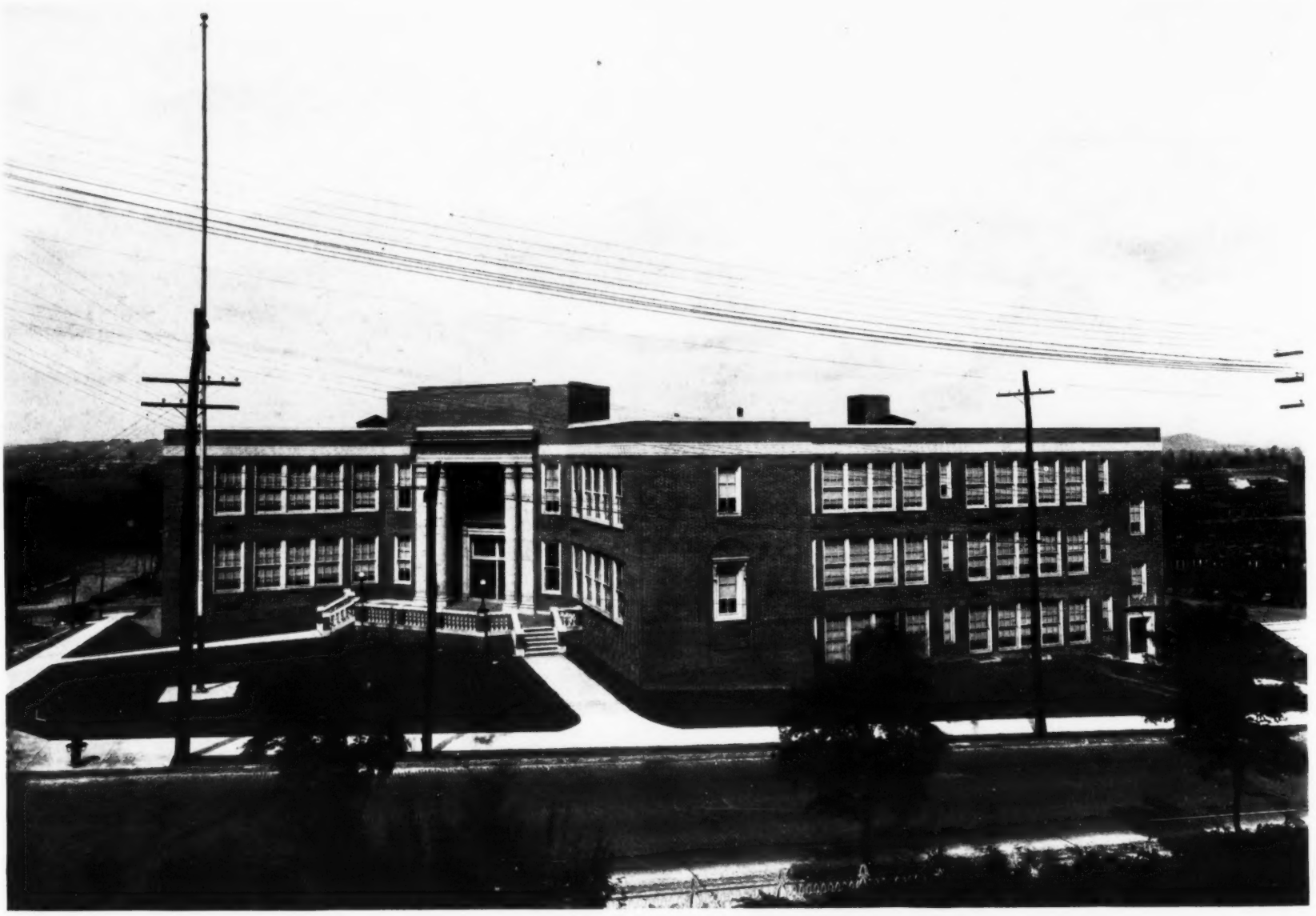
The building is heated by means of a steam-heating system with exhaust ventilation through coatrooms, using low-pressure steel boilers. Sewage disposal is provided by means of a septic tank and cesspool system. The toilet rooms are provided with sheet-steel toilet partitions and are locally ventilated.



MILLMONT SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.



PLOT PLAN, MILLMONT SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.



RIVERSIDE SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.

An electric ash hoist has been installed for the removal of ashes. Provision has been made for the installation of a future program clock, intercommunicating telephone, and fire-alarm system.

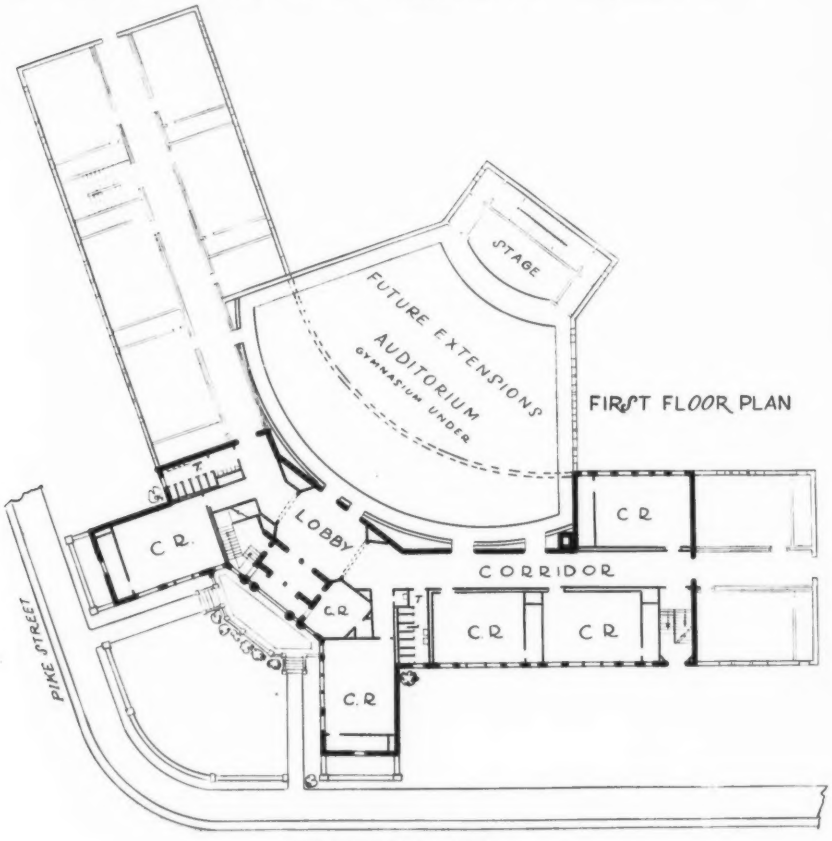
The Millmont School

The Millmont School was also erected from the proceeds of the school-bond issue and is located in a suburban district. The construction of the building is similar to that of the Northmont School. It is a two-story building containing eight rooms, an auditorium for school and community use, and a gymnasium. The building has been arranged so that it may eventually be enlarged to 24 rooms. It contains a teachers' room, a principal's room, a small library, and a medical inspector's room.

The building is heated and ventilated the same as the previous building and the equipment is identical.

The Riverside School

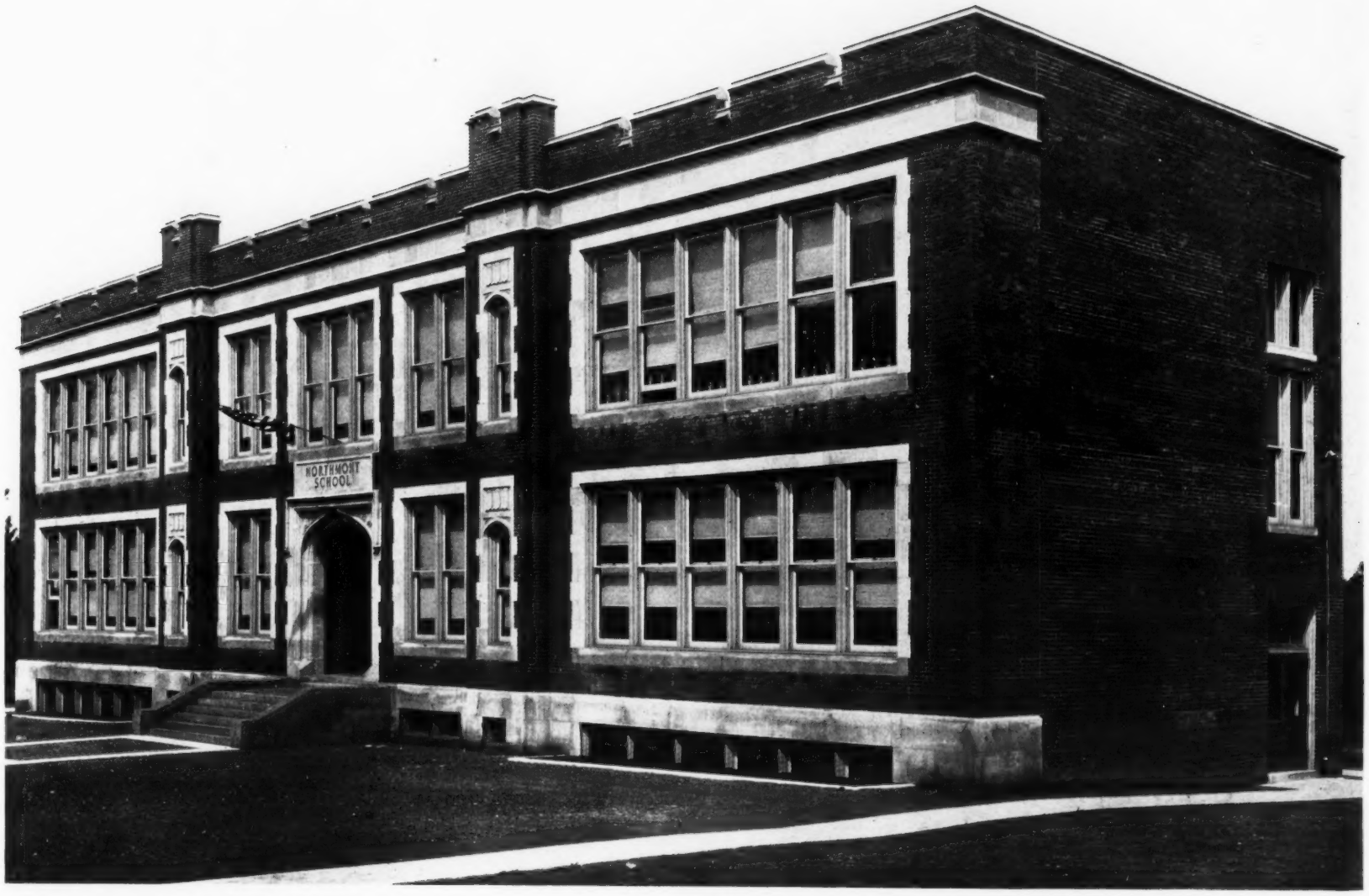
The Riverside School is the third school built from the proceeds of the school loan and stands on a large but steep lot, close to an industrial section. The size of the lot allows sufficient room for playgrounds, tennis courts, and the like. The



FIRST FLOOR PLAN.

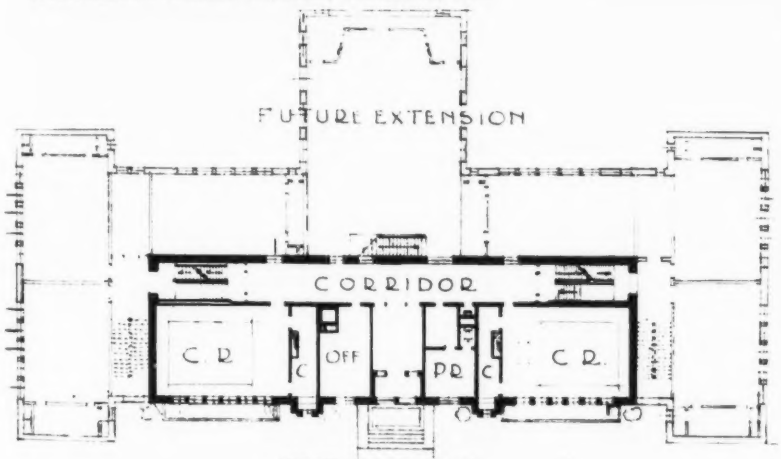
LOBBY.

RIVERSIDE SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.

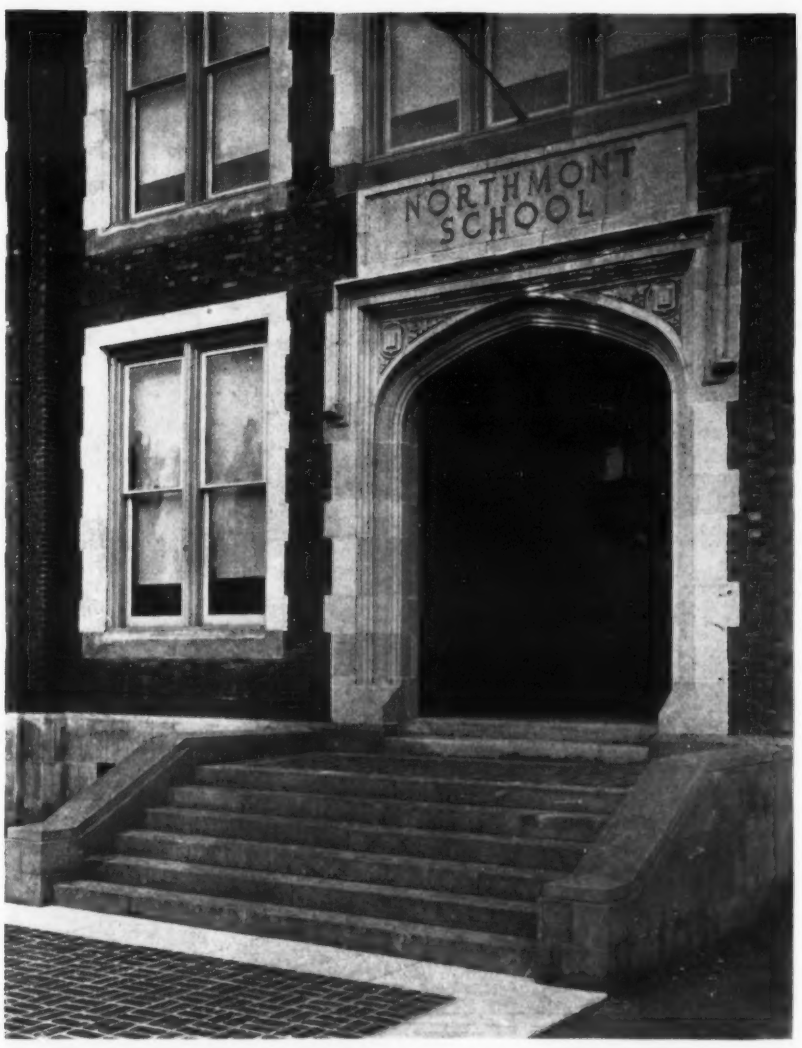


NORTHMONT GRADE SCHOOL, READING, PA.

Frederick A. Muhlenberg, Architect, Reading, Pa.



FIRST FLOOR PLAN.



A TYPICAL CLASSROOM.

NORTHMONT GRADE SCHOOL, READING, PA.
Frederick A. Muhlenberg, Architect, Reading, Pa.

DETAIL OF ENTRANCE.

MUSEUM AND ART GALLERY, READING, PA.
Alexander F. Smith, Architect, Reading, Pa.

construction is similar to that of the buildings previously described.

The building contains thirteen classrooms, an auditorium, and a gymnasium, and has been arranged to permit of enlargement to 28 rooms.

The building is heated by means of a combined communicating telephone, and fire-alarm system. pressure steel boilers. Exhaust ventilation is provided through coatrooms, with a separate exhaust for the toilet rooms. The Johnson system of heat control is used throughout the building. The building also has a teachers' room, a restroom, a principal's room, a library, and a medical inspector's room.

An electric ash hoist has been installed for the removal of ashes and electrical connections have been provided for a future program clock, intercommunicating telephone, and fire alarm system. The sewage disposal is provided by means of a separate tank and cesspool system. Steel veneered partitions are found in all toilet rooms.

The erection of this building required considerable thought and careful planning. The irregular character of the lot made it necessary that the building be erected diagonally opposite the corner. Owing to the grade conditions only thirteen rooms were included in the first unit erected.

The Glenside School

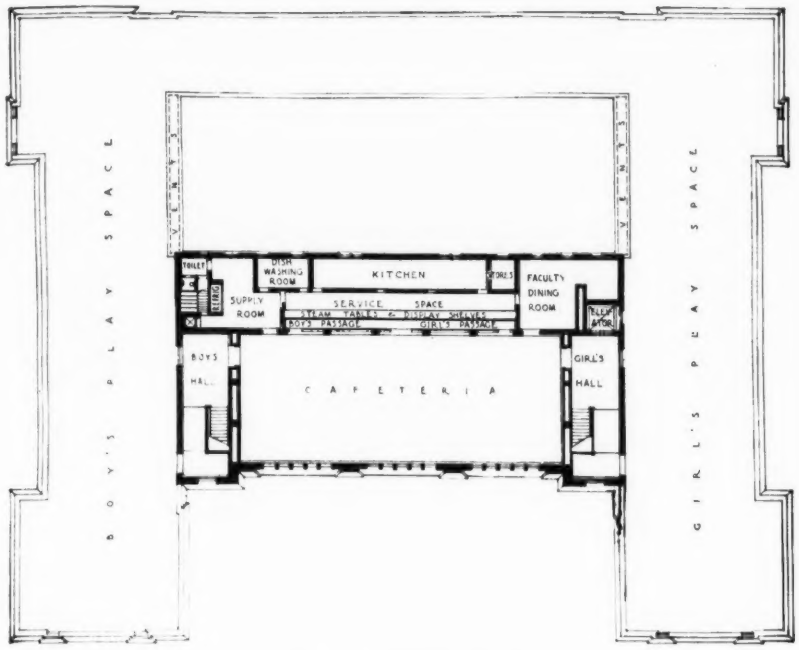
The Glenside School is located on a large lot which is fairly flat in two sections. The building proper is erected on the upper level and the lower level is given over to tennis courts, baseball diamond, and playgrounds.

The construction of the building is similar to that of the other buildings previously described. It contains six classrooms and a gymnasium and provision has been made so that the building may eventually be enlarged to a 24-room structure. There is a teachers' room, a principal's room, a small library, and a medical inspector's room.

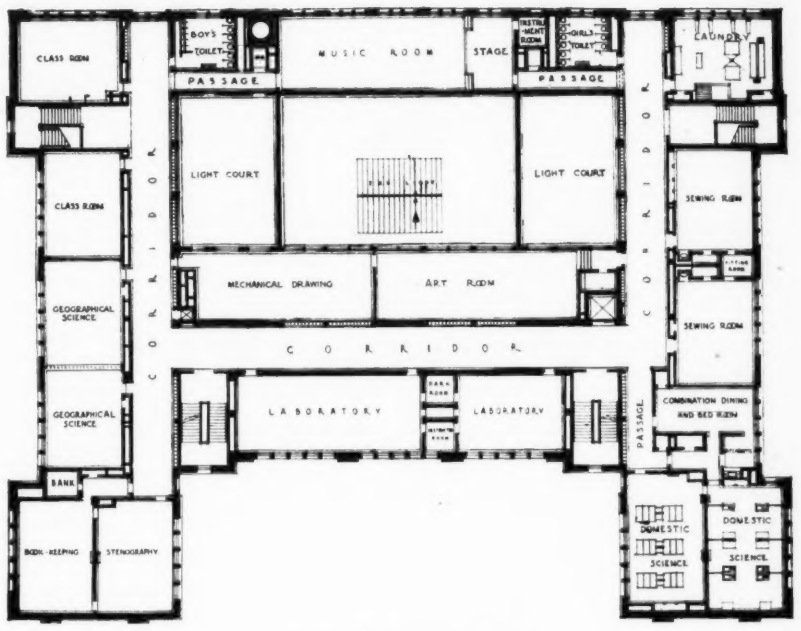
The building is heated by means of a combined unit-and-straight steam-heating system, using high-pressure steel boilers. Sewage disposal is provided by means of a septic tank and cesspool system. Steel veneered partitions have been installed in all toilet rooms.

(Concluded on Page 124)

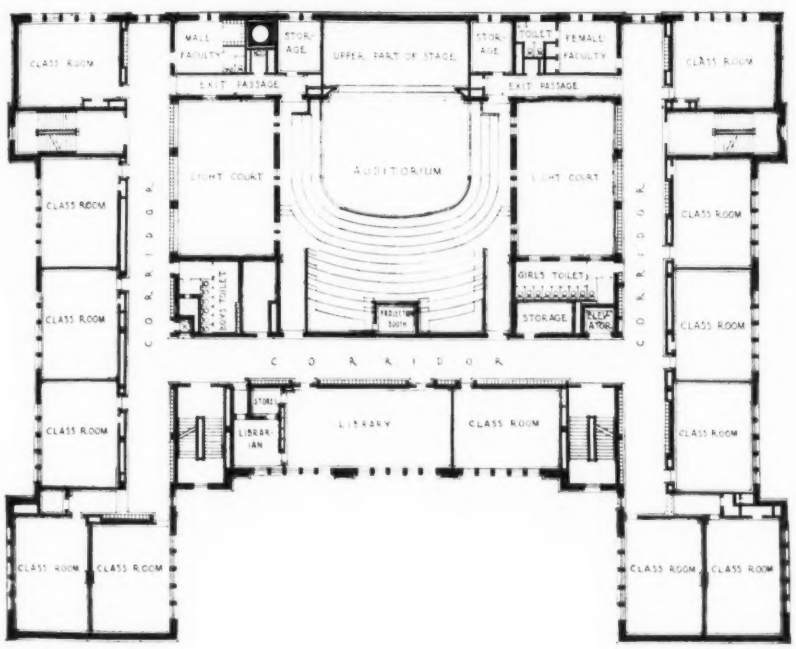
SOUTHERN JUNIOR HIGH SCHOOL, READING, PA.
Scholl & Richardson, Architects, Reading, Pa.



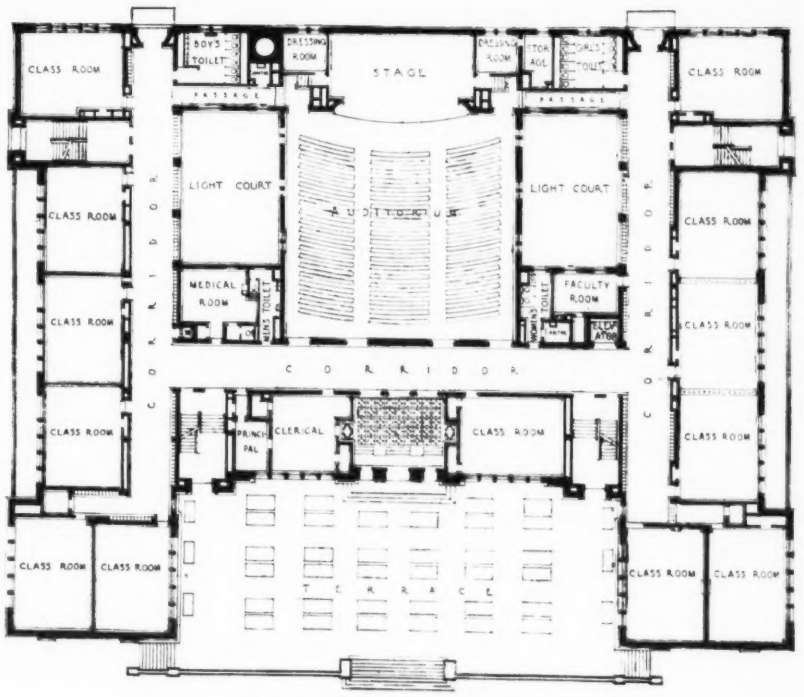
·PLAN OF FOURTH FLOOR·



PLAN OF THIRD FLOOR



·PLAN OF SECOND FLOOR·



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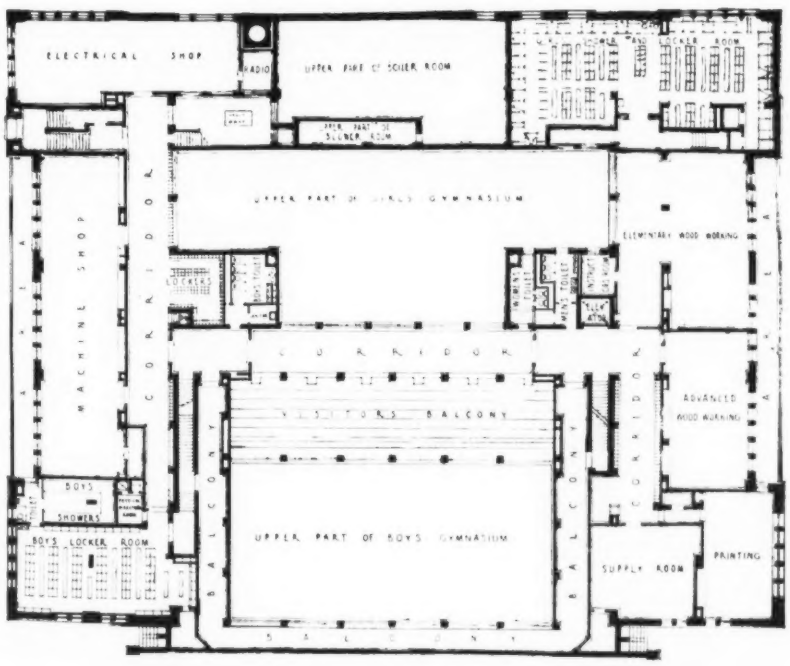

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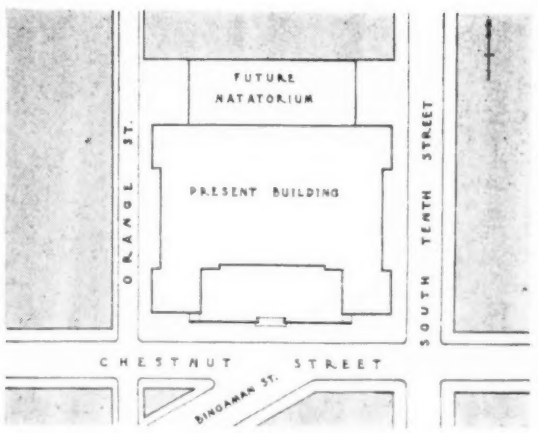
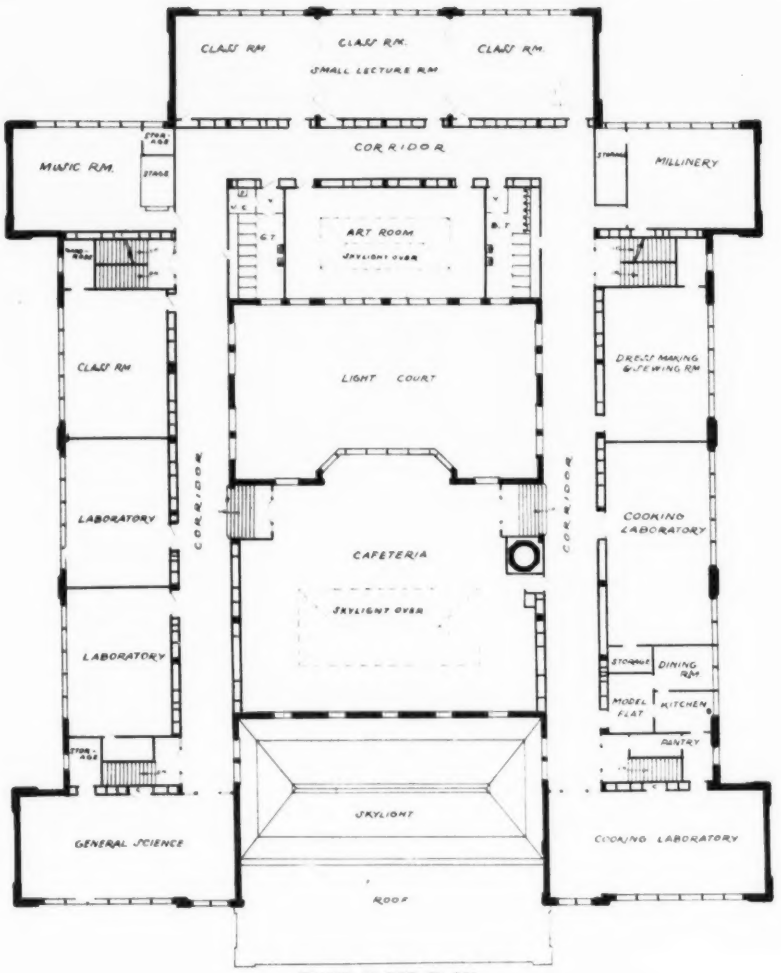
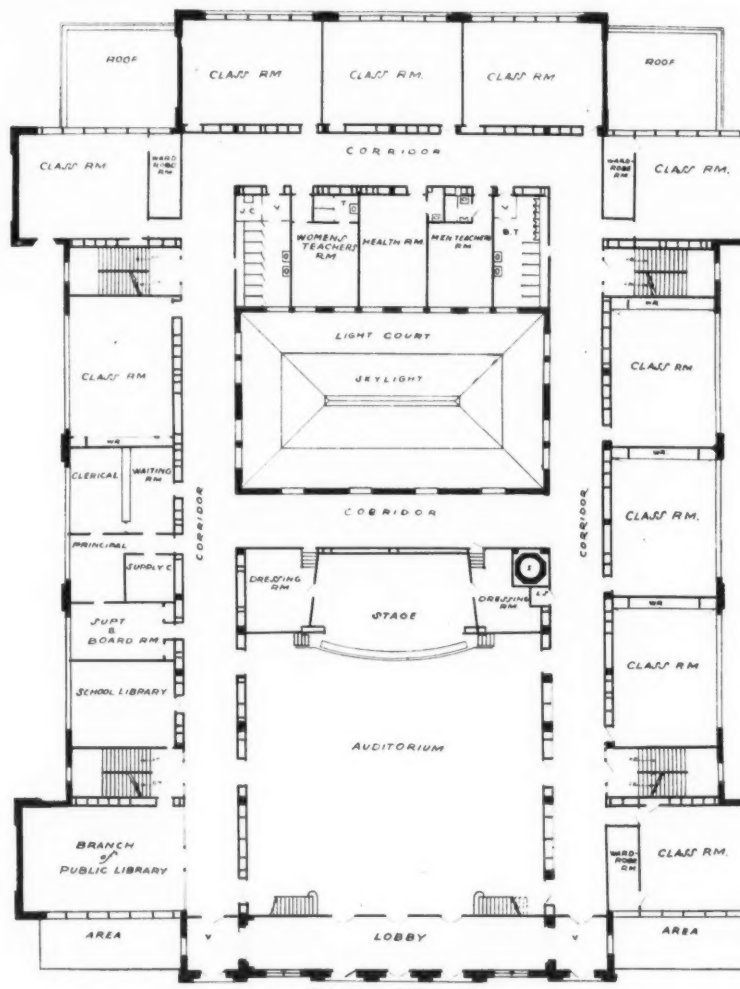


PLOT PLAN.

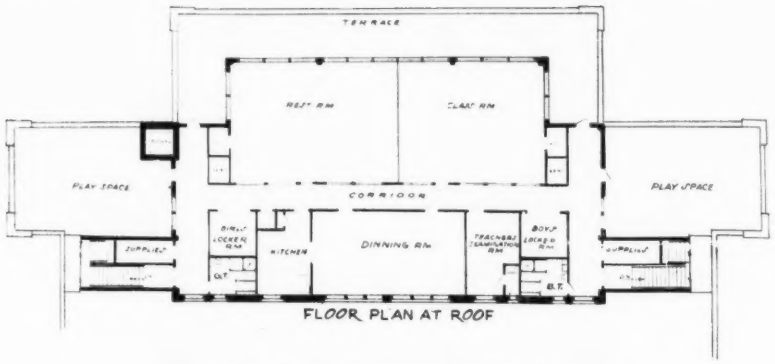
FLOOR PLANS OF THE SOUTHERN JUNIOR HIGH SCHOOL, READING, PA.
Scholl & Richardson, Architects, Reading, Pa.



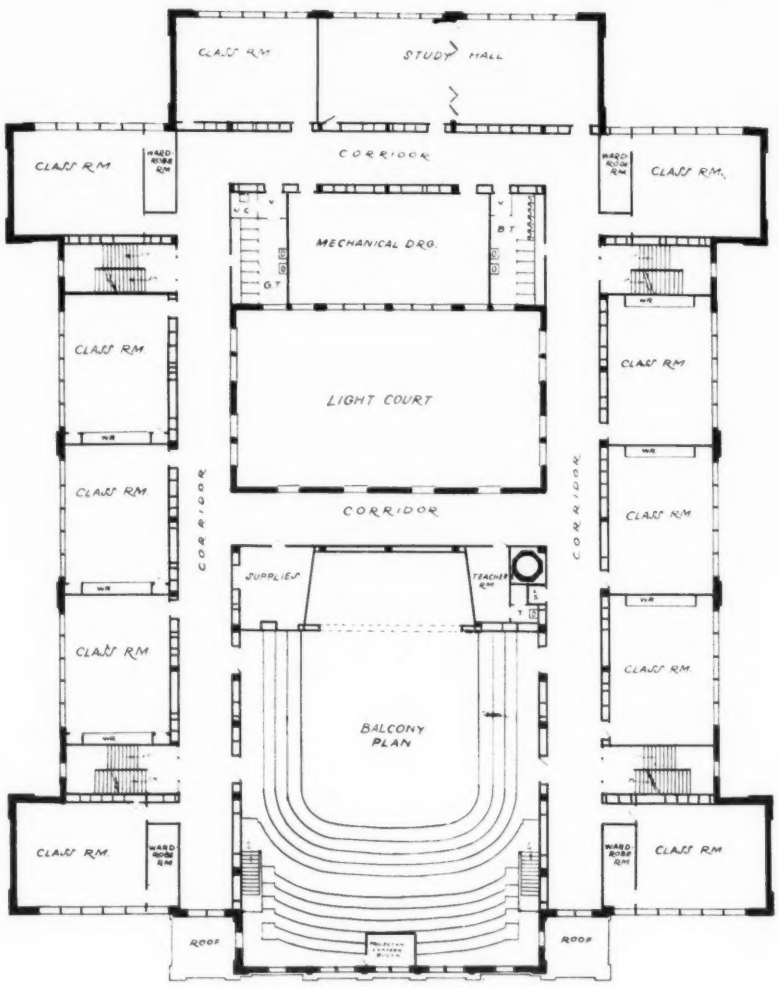
THIRD FLOOR PLAN



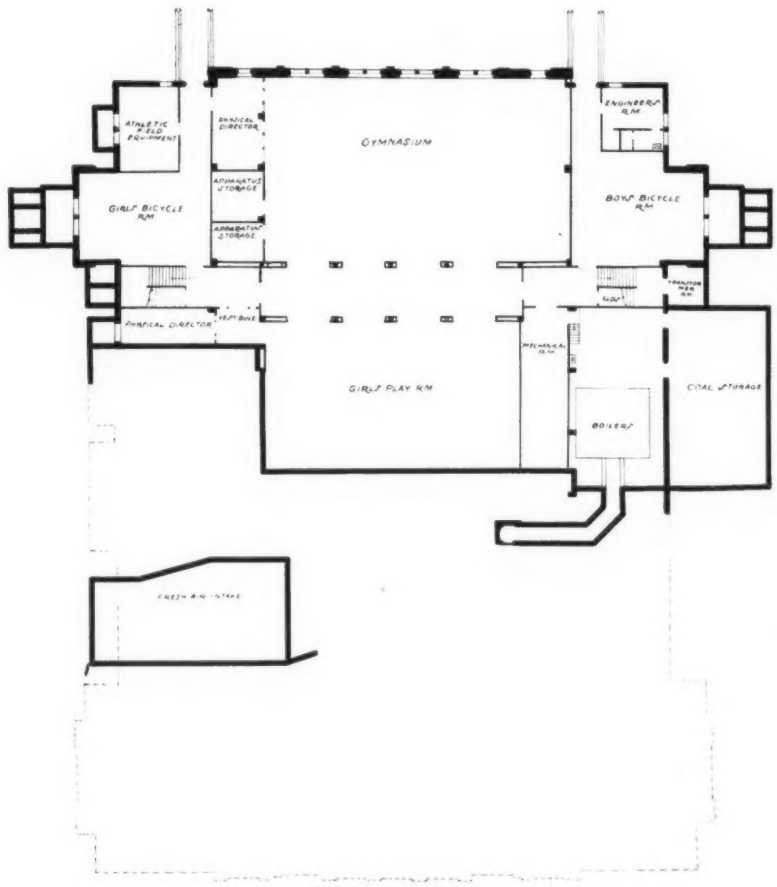
FIRST FLOOR PLAN



FLOOR PLAN AT ROOF



SECOND FLOOR PLAN



SUB BASEMENT PLAN

FLOOR PLANS OF THE NORTHEAST JUNIOR HIGH SCHOOL, READING, PA.

Alexander F. Smith, Architect, Reading, Pa.

Salesmanship from a School Buyer's Viewpoint

John H. Jollief, South Whitley, Ind.

In my capacity as head of a small-town school system it is my privilege and responsibility to purchase considerable supplies during the course of a year. As I have been doing this for several years I have listened to the sales talk of scores of salesmen who, it seems to me, were specialty salesmen within the broad meaning of the term.

Some salesmen leave my office with an order for goods; others go away without the desired order. Why do some make sales while others do not? It shall be my purpose in this article to point out a few of the reasons; to give my own reactions which courtesy and business judgment as well as professional training prohibit my giving to salesmen as they come and go.

The man who is trying to sell a line of inferior goods does not make a sale with me. If, for example, he is selling reference sets and insists that his books are equal to or superior to any one of some three or four standard works with which I am particularly familiar, I know to a certainty that he will not make a sale. For practical, everyday use I want reliable, standardized goods. Goods made to sell at a low price, rather than to furnish quality at a reasonable cost, are too expensive for public-school needs. Personally, I occasionally feel sorry for the individual who will take his time and the time of others in trying to sell an article of inferior quality when there are so many highly desirable articles available. It always seems to me that the salesman as well as the publisher or manufacturer has used very poor judgment.

Personal Appearance Valuable

As an individual I know that I am influenced largely by first impressions. I presume the same characteristic prevails to a greater or lesser degree in others. If so, then many salesmen apparently fail to recognize the importance of making a good impression, for they neglect a number of highly important matters concerning this. I do not enjoy transacting business in my school office with a salesman who is careless and indifferent about his personal appearance. Somehow or other the receptive mood with which I greet every caller and which is so favorable to him, fades away as I note his disregard of personal sanitation and self-respect.

Perhaps my attitude is a result of my professional training in always insisting and requiring that prospective teachers—who have something to sell just as surely as the ordinary salesman—shall be neat and clean. Very probably the training is carried over and I somewhat instinctively or perhaps unconsciously make the application. I like to have the salesman appear prosperous, then I feel he represents a company that is worth while. Being well groomed I consider of very vital importance in effective salesmanship. It is the first attribute used in a successful approach. Without it a salesman may fail entirely in securing the prospect's attention, so essential to interest and the creation of a desire which eventually leads to a decision to make a purchase.

It may appear very critical on my part, but I confess I am somewhat prejudiced against the man who will smoke his cigarette in my office while I am transacting business with him. Cigarettes and public schools are diametrically opposed, therefore, he has no right to indulge in the habit while in the building. Outside I probably would not think so much about it. I am today laboring under a prejudice against a certain architect whose cigarette smoke nearly blinded me as he explained his blue prints. Conformity to simple matters of courtesy is undoubtedly an important factor in salesmanship.

There is also the use of poor English. I do not permit this to spoil a sale, but I can see no valid reason nowadays with our good schools why salesmen should not be educated at least in the proper use of the mother tongue. Poor English detracts from a salesman's efficiency just as surely as can be, at least such is the case when dealing with most school superintendents.

Reliability and Candor

Aside from a good impression and being governed largely by it, there are several other factors which influence me so far as an actual sale is concerned. I will not buy from the man who gives me information which I know to be unreliable or deceptive. Take for instance the case of the salesman who recently called upon me with a book proposition. His first statement was this, "I am from the state board of accounts." Now I knew that the state board of accounts did not send out men to sell sets of books and so informed him. I would not consider his proposition for I knew he was using deceptive methods. Also I knew why he wanted me to think he was from the state board of accounts. I "called his bluff," as it were, and hoped others would treat him likewise. His deception very probably worked with many school officials unfamiliar with school law but it did not work with me.

At the risk of being termed egotistical I shall point out another characteristic which tends to operate against the salesman rather than in his favor. When a salesman comes to the building I prefer that he sees me first. I object to the method some use in which the janitor is sought and then I am presented with a list of articles which the salesman has made out following a conference with the janitor. Though I may go immediately to the janitor for his requisition, yet I prefer to do that myself rather than to have the salesman do it. The salesman may argue that he is saving my time, but I know that he is simply furthering his own interests with perhaps the unwilling assistance of my janitor. A small matter apparently but only another factor in salesmanship.

I will not buy from the salesman who indulges in self-pity. This is presumed to be one of the leading failings of women. I recall the case of the young lady who tried to sell me a $200 lyceum course. She felt entirely too sorry for herself to be a capable saleswoman. Buying lyceum courses was a business matter with me, not a mere matter of pleasing a woman, or of helping her make a better record than some other salesman of lyceum courses. To me a sale is a business transaction of mutual profit. If an article to be purchased can not stand on its merits then I do not think it deserves my thoughtful consideration.

The Fault Finder

I will not buy from the salesman who criticizes his competitors and their goods. If he must criticize, let it be *constructive,* not *destructive* criticism. A few years ago when I was ready to buy my first school car the salesman for a certain make was a master hand at finding fault with all makes of cars other than the one he was trying to sell me. Had he spoken tactfully concerning the other cars, pointed out the superiority of his own when compared with the competitors, I am quite sure I would have purchased his car. As it was I bought another car.

I may buy but I do not approve the method of the salesman who tells me I am being given special consideration as to terms, when I am morally certain that all are given the same terms. It has too much the appearance of flattery which I do not desire.

I generally fail to buy from the salesman who wants to take my time when I have a class at hand or who uses such poor judgment as to hold me thirty minutes from my lunch. As a rule, schoolmen generally operate on a fixed schedule, therefore, salesmen should give some consideration to the time which one has at his disposal. Only a few days ago a woman came along with a certain kind of library. Though it was lunch time she could not wait until I returned for the interview. The longer she kept me from my lunch the more opposed I became to her books. The result was a half hour practically wasted with no sale. Had she waited until my meal had been eaten I undoubtedly would have ordered her books.

I will not buy from anyone if I have the slightest suspicion he is trying to "put something over" on me. This of course is only natural. I am not naturally suspicious, only reasonably cautious. I will not permit a salesman to go on his way thinking I am as big a fool as he thought I would be. I give every salesman the courtesy of an interview. If I were a salesman I am sure I would want to be treated that way.

I want to make my own decisions, though I am perfectly willing to accept the salesman's helpful suggestions in arriving at my decisions. It is I, not the salesman, who must assume full responsibility for purchases. Experience soon teaches one the degree of reliability of salesmen's recommendations. Some can be depended upon while others are not worthy of such consideration.

I do not object to a salesman's telling me names of others who have bought his goods, though I know full well he will use my name to help sell the next prospect. I know too that he is making use of the power of suggestion, of emulation, of friendly rivalry, and of willingness to equal or excel.

In conclusion, the salesman I admire is well groomed, appears prosperous, has courage in the face of adversity, is sincere and straightforward in his dealings, maintains a proper attitude toward those with whom he comes in contact, is broadminded, has a keen sense of humor, a pleasing personality, has confidence in his ability to sell and in the thing he sells, does not criticize his competitors, gives due consideration to the opinions of others, has the right mental attitude toward matters of common interest, knows his business, knows values, does not practice affectation, remembers me when he meets me a thousand miles from my office, and treats me as courteously as though we were back once again in the school office, he a salesman and I a buyer.

VALUE OF A VOICE

The preserved language of printed texts and other forms of written material are cold and lifeless in themselves. They must be "lifted" from the page by the instructor and made living things in speech, in other words, interpreted. It is his chief business to put inspirational meaning and fuller meaning into all oral explanations and classroom speaking. Language becomes vital, effective, and inspirational, not by a semi-intelligible pronunciation of words in a voice which is the result of thoughtless driftings and habits. It does become vital and effective by proper physiological pronunciation, a tone quality, and a pitch of voice thoughtfully developed and cultivated.—Adrian M. Newens, Lincoln, Nebraska.

THE AMERICAN
School Board Journal

WM. GEO. BRUCE
WM. C. BRUCE } EDITORS

EDITORIAL

BUILDING A CHINESE WALL AROUND TEACHER SERVICE

The policy of giving preference to the local teacher applicant as against the nonresident applicant is generally recognized by school administrative bodies. The condition which qualifies the preference is that it shall be exerted only where all things are equal, namely where the local applicant fully measures up in point of character and fitness with the applicant from the outside.

The small-town people advance an argument against the nonresident teacher which is worthy of consideration. It is here believed that the teacher is not only a classroom worker but a social factor outside of the school as well. The suitcase teacher who leaves town on Friday night and does not show up again until Monday morning, remains a stranger to the community. She withholds her patronage from the local merchant and manifests no concern in the civic, moral, or material progress of the townspeople. The teacher is looked upon as an integral part of the life and labors of the community and is expected to participate in the same. What holds good in the small town cannot, however, be said to apply with equal force to a large metropolitan city.

Since the teacher surplus, which prevails throughout the country, has become more acute, there is a tendency to seek some relief through the introduction of restrictive measures. One of these is to bar the nonresident teacher. Some months ago the question arose in the Boston school committee. Later the board of education of St. Louis, Mo., considered a resolution seeking to bar all teachers residing in the surrounding suburbs from service in that city. In Boston the rule failed of adoption, in St. Louis it is still pending.

Such a rule places a premium upon residence rather than upon professional merit, and ignores the interrelations of an American center of population to its surroundings. It seeks to build a Chinese wall around a school system, and proceeds upon economic considerations which in themselves are narrow and short-sighted.

A great city like St. Louis draws its sustenance and vitality through the patronage it receives throughout the surrounding and the great southwest country. Its economic rootage extends to every hamlet in a territory covering a wide area. St. Louis has become a strong center of trade, commerce, and industry because the surrounding units of population have extended their patronage.

It would be just as logical for any American city to bar the commercial products of St. Louis in the interest of home industry, as it is for St. Louis to reject the educational products of other centers in the interest of the local teacher talent. The fact that a teacher happens to reside in a suburban village does not incapacitate his or her service as a teacher. The fact that goods are manufactured and sold in St. Louis does not make them less valuable than those coming from Kansas City, Chicago, or any other city. Quality and price determine sales, just as character and fitness must determine teacher service.

A great American city whose economic stability depends not only upon the character of its commercial leaders but upon the good will of the people of a large area of country, cannot afford to engage in provincial tactics. The rule of merit and adaptability applies in the choice of teachers as it does in the choice of any other service. No city dependent upon an outside patronage can consistently engage in narrow restrictions. It cannot say in one breath: "Our doors are wide open for business; we want your trade," and in another, "But our doors are closed to your professional talent. We want your money, but we don't want your teachers."

Every school system has the right to fix its own professional standards, but it cannot consistently rule out competent workers because they happen to be educated in another city or state, or because they happen to live just across the limits of the town. A teacher living thirty miles from a schoolhouse may be more competent than the one that lives next door. If she is punctual at her post and performs her work efficiently and faithfully, the question of residence can in no wise become a bar to employment.

There is, after all, one controlling thought which must never be relinquished. A board of education should lead in adhering to policies which are as fundamental in educational service as they are in the field of commerce and industry. What is deemed narrow and inexpedient in business life cannot be deemed wise and acceptable in school life. Certain fundamentals are applicable to all forms of service. The community has a right to look to the school administrative body for policies that are recognized as being basic in every business enterprise and that are designed to serve an entire people rather than a minor fraction.

Surely, St. Louis would not for one moment think of injuring its marvelous commercial prestige by inaugurating the Chinese-wall principle simply to protect a few local industries. Nor can the big, splendid school system of St. Louis consistently hold to rules which contemplate small benefits, but which are wrong in principle and ignore the larger benefits involved in the procedure.

HAVE TEACHERS A RIGHT TO GO ON A STRIKE?

This question has recently been raised in the city of Seattle, Wash., where a number of teachers have formed a union affiliated with the American Federation of Labor. The teachers of that city are at variance with the school authorities over the salary schedules, and it is believed that the union is designed to force a salary raise through the aid of a teacher strike.

The spectacle of seeing teachers walk out of a schoolhouse, in protest of something that displeases them, is not new. Such strikes have usually, however, been confined to single schoolhouses and have been in protest of the dismissal of a principal or teacher. On rare occasions only have teachers gone on a strike because of a salary controversy.

The issue in reality reduces itself to the query of whether teachers can consistently organize themselves into a labor union for the purpose of entering into collective bargaining on the wage question. In Seattle the high-school teachers propose, through the intermediary of a union, to force a twenty-five-per-cent increase in salaries.

In its broader aspects the subject involves some serious considerations. Organized labor has invited policemen, firemen, and school teachers to its ranks, but the wisdom of unionizing those engaged as public servants has always been vigorously discountenanced. Only in a few instances has the question become an acute issue, but in each of them public sentiment put an end to movements designed to place public servants under the direction of other than public authority.

In discussing the Seattle case the Spokane *Review* says:

"Teachers in the public schools are not on the same footing with employees in privately owned business and industry. They are serving the public and derive their pay from taxes that may be forcibly collected from the people. They hold the same broad relation to the public that is held by soldiers in the army, sailors in the navy, and policemen and firemen in cities. When they strike, they mutiny against the public. When employees in private owned business and industry strike, their issue is with their employers. If the Seattle teachers adhere to their threats, their bluff should be called. If they quit their duties in a body, their contracts should be regarded as automatically canceled and their places should be filled with other teachers who have a better conception of their obligations to the people."

This unquestionably expresses the attitude of the general public on the subject. It presupposes that the board of education, representing as it does the whole public, will deal fairly with those employed in the public service. A body of teachers cannot consistently be subject to the call of the business agent of a labor organization as against the orders of the school superintendent or the board of education. The administration of a school system is as much a public business as is the administration of a police department or a fire brigade. The public, which is vitally concerned, is not likely to expose itself to the embarrassments arising from a conflict of authority, or consent to the danger of a divided allegiance on the part of its servants.

THE SHAKE-UP IN THE NEW YORK SCHOOL-BUILDING DEPARTMENT

The school-building operations of New York City have for years been conducted without friction and with reasonable efficiency. In view of the fact that these operations have been tremendous in volume, and conducted under a constant pressure, the school-building efforts of the first city of the nation must be regarded as a distinctive achievement in the field of school architecture.

But trouble has come at last. William H. Gompert, the chief architect employed at $25,000 a year has suddenly resigned. Building operations involving millions of dollars have been halted pending an investigation as to the character of construction engaged in. Charges are made to the effect that the contractors had violated their agreements and that safety of the recent structures is in question.

For a quarter of a century C. B. J. Snyder was at the head of the school-building department of New York City. He planned and built more schoolhouses than any other man on earth. But, no one ever questioned the quality of the buildings constructed or the methods employed in dealing with contractors. Nor does anyone question the integrity of Architect Gompert in the performance of the huge task which was his.

The fact remains, however, that in schoolhouse construction work, as in all other construction enterprises, eternal vigilance must be exercised. Under the competitive system of contracting there is the tendency to "skin" the job. A contractor in his zeal to get the job may have figured too closely.

In such cases the contractor may want to retrieve a loss or unduly increase his profits by introducing inferior material or superficial workmanship. If the inspectors are in league with him the deception may win. But the conspirators are never safe from exposure.

Howard W. Nudd of the Public Education Association asks: "Who is responsible?" The answer, he holds, is to the effect that the superintendent of schools can be held solely responsible. But he qualifies this answer by adding that "The faulty construction of school buildings may be due to any one, or to all, of three main factors. The plans for the buildings and the specifications for material to be used may be at fault. The contracts may be improperly awarded to unreliable firms. Or, the official inspection of the buildings may be lax either because of inefficiency or corruption. In each of these steps the superintendent of school buildings plays an important and responsible part, but in none of them does he play the sole part nor does he make the final decisions."

In brief, he contends that the system may be at fault. The lesson to be drawn from the experience which has come to the school authorities of New York City by no means brings the character of the school architect into question. Nor does it mean that the school administrators throughout the country must be cautioned against such architects. The average school architect is honest and capable.

It does mean, however, that eternal vigilance is the price of a perfect school building. The architect is supposed to superintend the construction operations as well as plan the building, but a tricky contractor may evade specifications before the architect makes the discovery of wrong doing. He may have to rely upon understudies, or assistants. These may be lax and neglectful. While the architect is supposed to check up on the contractor, instances have arisen during the past year where somebody was called upon to check up the architect or his representatives.

School officers intrusted with the selection of schoolhouse plans, and the awarding of contracts, ought also to watch the progress of construction. They are usually familiar with the specifications and will know in a general way whether these are being observed in the construction labors. At any rate, while the architect is supposed to watch the contractor, he may be compelled to assign an understudy to perform that task for him. It is, therefore, well to keep in close touch both with the architect and the progress of the structure.

The morale of those engaged in construction labors is considerably stimulated when it is generally known that the school authorities manifest, not a meddlesome, but a wholesome interest in the dispatch and character of the building project in hand.

SOME CHICAGO LESSONS IN SCHOOL ADMINISTRATION

The innovations and departures in school administration engaged in by the larger unit of population usually excite interest on the part of the smaller units lying in adjacent territory. While the smaller cannot emulate the larger in all things, there are possibilities for progress and improvements, or for wholesale short cuts, which apply to both large and small school systems. Thus the larger school system with the momentum of size, the scope of its financial operations, and its command of high professional service, is endowed with something of leadership.

The city of Chicago, the giant of the mid-west country, a great leader in the field of commerce and trade, finance and industry, can also reasonably be expected to manifest leadership in a civic and social sense. The administrative machinery of its school system ought to serve as a model to the surrounding country. Out of a population of three million people a high-minded and capable board of education can be recruited, professional leadership of the most efficient type may be commanded, an army of well-trained classroom workers can be chosen. The tax ability of the community warrants splendid schoolhousing and an equitable salary schedule, and permits all the essentials that go to make for an efficient school system.

But what has been Chicago's school-administration history for the past two decades? It is a record of turmoil, of scandal and of deception. Educational leaders have come and gone in rapid succession. Such illustrious men as Lane, Cooley, Young, Chadsy, Shoop, Mortenson and McAndrew were permitted to round out only a short term of service. Some were worn out by strife and contention, some were politely driven out, and some were brutally kicked out.

What has caused the trouble? Was it the appointive system of school-board making? No, the appointive system is better suited than the elective system for large cities. Was it due to the character of the men and women elevated to school-board service? No, the quality of citizenship chosen has been far above the average.

The answer to the main question must be found in the fact that the board of education is constantly exposed to political domination. The mayor and the city council feel that since they create the board of education they are responsible for its policies. These policies become the football of political warfare and factors in the political fortunes of municipal officials. In brief, the politician has a voice in the administration of the schools. That's the story in a nutshell.

If the larger school unit in the United States serves the smaller by suggesting progressive departures, then it follows, too, that Chicago teaches what not to do rather than what to do in the field of school administration. It teaches that politicians must not be allowed to run the school board, that the superintendent must not be subject to the whims of aldermen, and that the army of schoolroom workers must be secure against outside influences if an efficient school system is to be maintained.

The prestige, prosperity, and power which the city of Chicago enjoys, in the economic world, its marvelous achievements in the field of commerce, trade, and finance, and some striking accomplishment in certain civic endeavors, would suggest at least its ability to administer its schools upon the most approved lines and in accordance with the highest ideals. No self-respecting American community can emulate the example set by Chicago in school administrative procedure and endeavor.

THE STATE OF WASHINGTON AND THE EDUCATIONAL DOOR

A few years ago the country experienced an acute teacher shortage. Today there is a large teacher surplus. In every state there are hundreds of women trained for the profession of teaching who have been obliged to turn to other channels of activity for a livelihood, or remain unemployed.

This situation has led to some peculiar expedients designed to afford relief. In one city it is suggested that a part-time system, whereby the employed teachers divide service with the unemployed, be adopted; in another an extension of the sabbatical year is urged, and still others have ruled against the married woman teacher with greater firmness. Then there has been the tendency everywhere to protect local teacher talent against the competitor from the outside.

None of these expedients has come to fruition, except that the unwritten rule to exclude the outside applicant has been drawn a little tighter. But the board of education of the State of Washington, last year adopted a definite rule which was designed to exclude teachers from other states. The rule provided that:

> "The state board has found it necessary to take steps to protect the graduates of the state educational institutions of this state, due to the fact that undue preference is given in our certification law to graduates of outside institutions. Several hundred teachers who are graduates of our own state institutions are now without employment and the preference in positions should be given our own graduates."

We have in these columns questioned the wisdom of such action. If character and fitness ought to control in the employment of the professional worker then it also follows that restrictive rules of the kind above enunciated are illogical and harmful. If the standards of the profession are to be raised and the efficiency of the schools are to be brought upon a higher basis then minor considerations cannot and must not be allowed to interfere. The interests of the individual must give way to the welfare of the mass, and in this instance the mass is represented by the school child.

But aside from the school interests there is the broader question of public policy. The State of Washington in its splendid development has received the services of men and women who were educated at the expense of other states. It must deal with the people of other states. It cannot live unto itself. Its products must find markets elsewhere and its people must seek recognition elsewhere.

We said in these columns, and say it again, that the interests of the several states are necessarily mutual and reciprocal. The products of Washington must find a market beyond the borders of that state if the agricultural, industrial, and commercial interests of that state are to prosper. Washington would not shut its doors to the trade of other states any more than Washington would expect other states to exclude its products or its people. Surely, that commonwealth would not relish the thought that other states discriminated against educators, lawyers, doctors, or clergymen, simply because they happened to be educated in the State of Washington.

Now comes the message from Washington to the effect that the state board of education had deferred the enforcement of the rule adopted in June of last year. The Spokane *Chronicle* in commenting on the good judgment exercised by the board says: "Graduates of state institutions may well be given some preference in the selection of teachers for Washington schools. But there should be no hard and fast rules that tie the hands of school boards when seeking the best teaching material for the classrooms."

It is intimated that the question will be referred to the legislature, but there is no likelihood that the legislature, being representative of the several interests, will adhere to a policy which can only prove harmful to the state's educational efforts, but which will be in violation of the interrelations which make for the economic vitality of Washington. The legislator will not care to invite retaliatory legislation likely to injure the prestige or material welfare of the great Pacific coast commonwealth. It must be assumed that the same good sense which prevented the board of education from inforcing a wrong policy will also guide the legislators in maintaining equitable relations with other states and with the nation as a whole.

Just a Moment, Mr. Superintendent

By a High-School Principal

Now and then I read an article, or a chapter in a professional book, on how to get a job. Many suggestions are made to teachers. Teachers are cautioned to write correct letters of application, to dress neatly, and to talk intelligently. Since there are so many teachers looking for positions, these articles and chapters serve a useful purpose. But may we not discuss, with profit, *employers?*

I am not a superintendent; I am not too old in experience; and I am not without a job. These facts notwithstanding, eight years of work as a teacher, department head, and principal leave me with a sincere conviction that all superintendents do not invariably give candidates a square deal. In this two-phased transaction of hiring a teacher, a superintendent sits on one side of the desk and a candidate sits on the other. Perhaps the candidate is an inexperienced girl with a degree and a debt, or a married man with children, or the victim of an unreasonable superintendent, or even a "rubber ball" whom politicians have tossed about. From every and any point of view the candidate occupies a difficult position.

Filling Vacancies in Teaching Positions

Not to digress from the purpose of this article, the superintendent likewise occupies a difficult position. Indeed many of the imaginary and real troubles of candidates have been brought about by candidates themselves. There are conscientious administrators who have met with unpleasant, and even bitter, experiences in their work of hiring teachers. When notice of a vacancy results in a flood of fifty unsolicited applications, a superintendent has his hands full. To add to his difficulties a candidate not infrequently attempts to advance his chance through a relative, or through a member of the school board. It is not uncommon for candidates to request interviews, to demand explanations, and to harass superintendents in many and divers ways. Give certain candidates interviews and they demand positions. The cross which any political administrative officer bears is that swarm of parasitic office seekers who dog and pursue him. A superintendent is similarly situated though to less degree perhaps. With the problem of married teachers, home-town teachers, local promotion, school-board favorites, outside community jealousies, and others *ad infinitum,* a superintendent enjoys no sinecure. The result of all this is natural and, in a sense, inevitable. Superintendents find themselves assuming what may seem to be unfair attitudes out of sheer defense and for the good of the service.

These facts notwithstanding, the thought lingers that the golden rule may still operate and that there are thousands upon thousands of sensible and honest teachers deserving of any superintendent's courtesy and attention.

Handling Teachers' Agency Applications

But let us get down to tacks. An agency writes a teacher that, according to the Plaintown *Bugle,* there is a vacancy in the third grade of the Plaintown schools. Will Miss So-and-So be a candidate? If so, will she not write the Plaintown superintendent? Miss So-and-So sends a letter of application which reaches the desk of the Plaintown superintendent. Now what will he do?

a) Why not acknowledge every letter of application? Remember that it wasn't the teacher's idea; it was the agency's idea. The chief educational officer in any community ought not and must not fail to be punctilious. A superintendent of my acquaintance uses a postal card with a form printed on it. He fills in the date, the candidate's name, and his signature. The effect of the card is merely this: the candidate has been informed that his application has been received.

Let us imagine that the superintendent does acknowledge a letter of application. He may state that Miss So-and-So's name will be placed on file, or he may state that the application has been received. What should he say?

a) Why not tell every applicant the truth? If the applicant is not to be considered, why not say so? Is it ethical to keep a candidate guessing? Hope springs eternal; silence is not refusal.

Now assume that a superintendent has asked an agency to suggest candidates. How should he proceed?

a) Why not examine thoroughly the credentials of candidates and cull out the obviously unfit? This preliminary work is most important. It does away with unnecessary traveling expenses of candidates. It saves the time given to useless interviews.

b) Why not investigate references personally? On the other hand, too much weight can be given to references. Says Thomas Jefferson: ".....information.....from the best of man, acting disinterestedly and with the purest motives, is sometimes incorrect."

Often a superintendent asks candidates for recommendations. Sometimes a candidate offers to loan such material for examination by a superintendent.

a) Why not return borrowed credentials promptly?

b) Why not keep borrowed credentials intact?

Usually a superintendent requires a candidate to call on him. Just why this should be the custom is not clearly apparent. Most candidates are not their real selves in a strange environment.

a) Why not observe a candidate in action?

b) Why not be reasonable about traveling expenses? Perhaps the plan of dividing the expenses is not unfair.

Not infrequently a superintendent in search of teachers depends upon his friends for suggestions, or upon teachers who have worked for him in some other community.

a) Why not look over the whole field? Consult the state appointment bureau. Remember that most universities have bureaus.

Occasionally but not often a superintendent is blessed with infallible judgment.

a) Why not beware of single impressions? A second interview is sometimes illuminating.

b) Why not remember that personality is a complex thing? A superintendent can never hope to be absolutely impartial. Personalities tune in with each other. He can, however, be as objective as possible.

And, finally, it must be admitted that superintendents are critical at times. When a superintendent catechizes a candidate he is a sort of judge, and for this reason there is a tendency to become unduly captious.

a) Why not put yourself in the candidate's place?

b) Why not be influenced by relevant details?

c) Why not remember always that it takes two to make a successful interview?

Interviewing Superintendents

These suggestions grow out of my personal experiences. For example, this spring I was invited to interview a superintendent. I traveled 180 miles. When I arrived several members of the school board were awaiting the appearance of a candidate for the position of athletic coach. I was ushered into the superintendent's office, where he talked to me for five minutes. Then he left me to go into the next room. There he looked out of the window and down the street. The candidate, however, was not in sight. I was again given five minutes. Again he left me to look down the street. This continued for an hour. Finally he admitted (a little sheepishly, I thought) that the position of coach was perhaps more important than that of principal. As a prospective employer he was a complete failure from that time on. There were 80 candidates; 78 men and 2 women, and I never did hear who secured the position. Of course, I paid my own traveling expenses.

Once at a superintendent's request, I left with him a batch of recommendations. They were originals and the superintendent assured me that he would return them promptly. It took ten weeks, three courteous letters, one insistent letter, and one angry letter to retrieve these recommendations.

Recently, I was asked to interview a superintendent 700 miles distant. This request was made by an agency. I had never corresponded with the superintendent and he had never seen my papers. Apart from these facts, I knew that the type of experience which I had had was such that I had little if any chance to secure the position.

During my experience I have encountered but one superintendent who made a practice of promptly acknowledging *all* applications. When the principalship of his high school was filled, he notified 39 unsuccessful candidates of this fact.

Establishing a Technic in Teacher Employment

But dark clouds have their silver linings. Many superintendents have worked out an efficient technic in teacher employment. Here and there one finds a golden rule working on both sides of the superintendent's desk. In my experience there is one which I shall always remember. It represents my conception of a square deal from beginning to end. A month before I was to receive my bachelor's degree I received a letter from a superintendent several hundred miles away. The writer stated that he had looked over my papers on file in a certain agency and that he would be glad to interview me at his office. He stated that he would pay my traveling expenses.

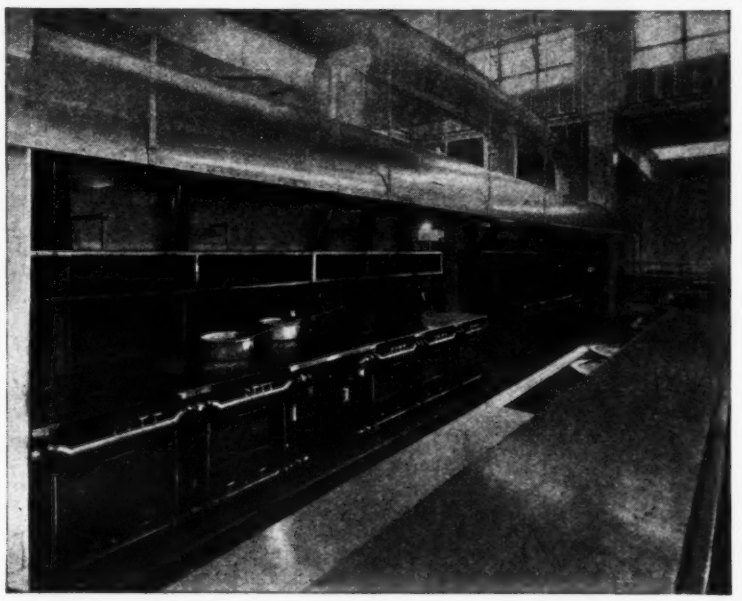
At the time appointed I appeared at his office. We talked on many subjects for two hours. At noon I was his guest at luncheon. Of all his questions one stands out in my memory: "What six books would you recommend to a 14-year-old boy who is going into a summer camp for ten weeks? Let us imagine that he must restrict his reading to these six books."

After we had left the table he said that he would appreciate it if I would consent to teach a class. I might teach any class and any lesson I chose. He loaned me a book from which I selected a poem. With the superintendent, the principal, and the teacher as observers, I did my best to interpret that poem. After the period was over and I stepped into the hall, he placed his hand on my shoulder and said, "Please don't think that I haven't realized the difficulty of the situation I placed you in." The pressure of his hand and the kindly expression in his eyes amply repaid me.

But the friendly inquisition was not over. I then interviewed the principal, and next the head of the department. When I took my leave, the superintendent asked me to telephone him at ten o'clock the next morning. That evening I saw a good play and spent the night in a hotel. At ten o'clock the next morning the superintendent gave me his decision. I often recall this experience. It was businesslike, thorough, and satisfactory—especially to me. If I failed, it was my fault. Whatever I had to give, I could give in three interviews and a period of teaching.

(Concluded on Page 148)

Each Meal's Gas Bill . . . 3/10¢
ON VULCAN HOT TOP RANGES



Nine in a Row! Vulcans at Notre Dame University, South Bend, Ind.

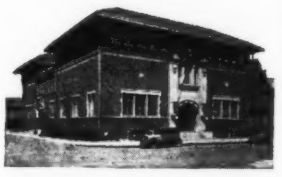
NOTRE DAME'S new kitchens serve 4,500 Vulcan-cooked meals daily at 3/10 cent a meal in gas costs! And Vulcan batteries in the Harvard Business School prepare 90,000 meals a month, each meal's gas estimated at 4/10 cent. Both institutions have yet to know "a Vulcan repair." Chef Bonin at Cambridge says, "It's Vulcans every time."

Not only colleges and schools. Foremost clubs and hospitals depend on Vulcans. Manhattan's Racquet and Tennis, Chicago's new Bankers Lounge, Philadelphia's exclusive Ledger Club . . . all benefiting from Vulcan heavy-duty cooking economy.

In hospitals such as Philadelphia's Methodist Episcopal and New York's Fifth Avenue, Vulcans keep down gas costs per meal to 2/10 cent. In natural gas areas, Vulcans operate at *even lower* cost!

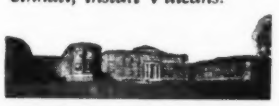
This *is* proof of Vulcan superiority . . . a result of Vulcan's *center* red hot spot, over the driving, four-ringed burner that permits perfect heat control.

If you are planning a new kitchen, or re-equipping an old, first study Vulcan *facts*. Send for your Vulcan book. Hotel Dept., Standard Gas Equipment Corporation, 18 East 41st St., New York City.



In Indianapolis, Ind., Hoosier Athletic Club members boast of their Vulcan-cooked cuisine. Installation by Citizens Gas Co. of Indianapolis.

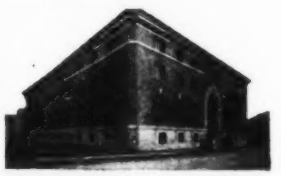
Maternity and Children's Hospital, Toledo, O., looked around for the best and had John Van Range Co., Cincinnati, install Vulcans.



Freedman's Hospital, Washington, D. C., serves its hundreds of sick-rooms from Vulcans. Installation by Dulin and Martin, Washington.

Notre Dame's new dining hall centers around entirely Vulcan-equipped kitchens. Installed by Duparquet, Huot and Moneuse.

Augusta Lewis Troup School, New Haven, Conn., serves its students from Vulcans installed by Bramhall Deane Co., New York.



Young Men's Hebrew Association, Pittsburgh, Pa., economizes with Vulcans. Installed by Equitable Gas Co., of Pittsburgh.

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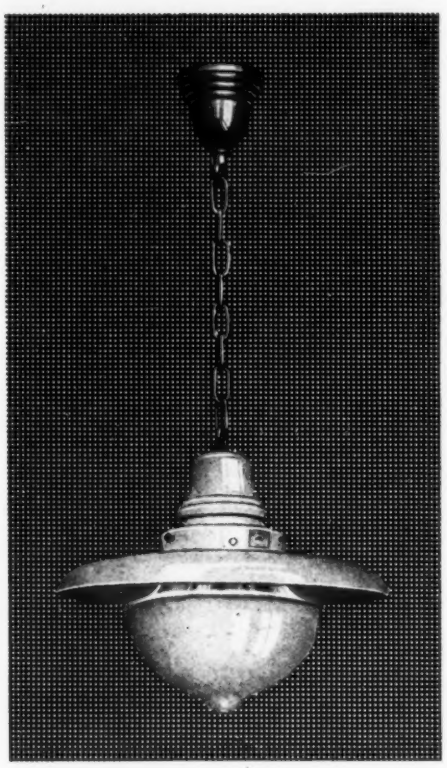

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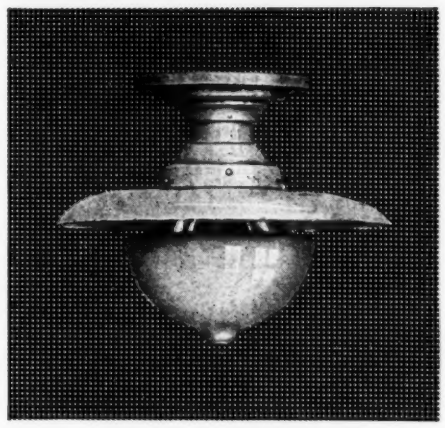

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SCHOOL LAW

Schools and School Districts

The validity of organizations of school districts cannot be questioned in a suit for school taxes.—State ex rel., and to use of Waddell v. Johnson, 296 Southwestern Reporter, 806, Mo.

The organization of a consolidated school district with 200 children of school age is held valid, though not 50 square miles in area (Mo. Rev. St., 1919, § 11258, as reenacted by the laws 1925, p. 331.). State ex inf. Gentry v. Meeker, 296 Southwestern Reporter, 411, Mo.

Consolidation, without the consent of the trustees or boards of education, or a vote of the electors, does not charge new district with bonded indebtedness of districts consolidated (N. Y. Education Law, §§ 128-130, 137; § 480, subd. 1, as amended by the laws of 1925, c. 102.).—Adriaansen v. Board of Education of Union Free School Dist. No. 1, Town of Marion, Wayne county, 223 New York State, 657, 130 Miscellaneous Reporter, 49, N. Y. Sup.

School-District Government

Parish school boards are bodies corporate with power to sue and be sued and are governing authorities of school districts (La. Act No. 120 of 1916, § 6; Act No. 17 of 1914, amended by Act No. 81 of 1918.).—Hawthorne v. Jackson Parish School Board, 5 Louisiana App., 508.

Districts having less than 200 children are of third class in which the director is elected annually (Oreg. L., §§ 5145, 5146, and § 5136, as amended by the Oreg. Laws 1925, p. 282.).—Fordham v. Stearns, 258 Pacific Reporter, 822, Oreg.

School-district directors are held without authority to forbid a principal to deliver a graduation certificate to a pupil who had completed the course.—State ex rel. Roberts v. Wilson, 297 Southwestern Reporter, 419 Mo. App.

School-District Property

Statutory provisions for filing itemized verified claims for labor and materials with designated person within four months after furnishing the last item before action on a school-building contractor's bond are mandatory (Acts of Iowa 38th Gen. Assem., c. 347, § 2, as amended by the Acts 39th Gen. Assem., c. 147.).—Francesconi v. Independent School Dist. of Wall Lake, 214 Northwestern Reporter, 882, Iowa.

Materialman's claim, with attached certificate, is held not "verified," as required to recover on a school-building contractor's bond; "verified claim"; "sworn" (Acts 38th Gen. Assem., c. 347, § 2, as amended by the Acts 39th Gen. Assem., c. 147; Code 1897, 3102.).—Francesconi v. Independent School Dist. of Wall Lake, 214 Northwestern Reporter, 882, Iowa.

Claims for labor and material must be filed with the secretary of the school board, to recover on a school-building contractor's bond (Acts of the Iowa 38th Gen. Assem., c. 347, § 2; Code 1897, § 3102.).—Francesconi v. Independent School Dist. of Wall Lake, 214 Northwestern Reporter, 882, Iowa.

A statute is held not to require approval of the school-building plans by the county superintendent before paying architect for preparing them (Calif. Pol. Code, § 1543, subd. 12, § 1608, subd. 4.).—Kistner v. Pomeroy, 258 Pacific Reporter, 619, Calif. App.

On the school board's repudiation of contract for the preparation of building plans, an architect could sue immediately for damages, even if approval by the county superintendent was a condition precedent to payment (Calif. Pol. Code, § 1543, subd. 12; Civ. Code, § 3532.).—Kistner v. Pomeroy, 258 Pacific Reporter, 619, Calif. App.

School-District Taxation

An oral notice to a school director of a special meeting of the board to call an election on a bond issue is sufficient (Iowa code of 1924, §§ 4221, 4355.).—Mershon v. Consolidated School Dist. of Olin, Jones county, 215 Northwestern Reporter, 235, Iowa.

A notice to a school director of a special meeting of the board to call an election on a bond issue is sufficient, where given by the secretary at the direction of the president (Iowa code of 1924, § 4355.).—Mershon v. Consolidated School Dist. of Olin, Jones county, 215 Northwestern Reporter, 235, Iowa.

School bonds, payable in 25 years, refunding bonds issued 10 years before and making total debts exceed constitutional limitation, are unauthorized (Okla. Const., art. 10, §§ 25, 26.).—Board of Education of City of Oilton, Creek County, v. Short, 258 Pacific Reporter, 915, Okla.

A parish school board had power in calling bond election to name but one polling place, within district containing parts of several precincts (La. Act, No. 46 of Ex. Sess., 1921, § 12; La. Const., 1921, art. 8, §§ 1, 3; Act No. 130 of 1916, §§ 38, 39.).—Sylvester v. St. Landry Parish School Board, 113 Southern Reporter, 818, La.

Successful bidders for school-district bonds are held required to pay interest on bid from date of bonds and after delivery thereof.—Graves v. Board of Education of Sylvania Village School Dist., 157 Northeastern Reporter, 766, Ohio App.

Liability for taxes for de facto school district cannot be defeated because the district has been disorganized before suit, since the collector is an agent of the state, and the district is not a party to suit (Mo. Rev. St. of 1919, § 12928.).—State ex rel., and to Use of Waddell v. Johnson, 296 Southwestern Reporter, 806, Mo.

The adoption of a budget by the electors of an illegally consolidated district is held not to preclude a suit to set aside taxes illegally levied (N. Y. Education Law, §§ 128-130, 137, 426, 435, 438; § 480, subd. 1, as amended by the N. Y. Laws 1925, c. 102.).—Adriaansen v. Board of Education of Union Free School Dist. No. 1, Town of Marion, Wayne county, 223 N. Y. S. 657, 130 Miscellaneous Reporter, 49, N. Y. Sup.

School-District Claims

A school district's petition to recover public funds, setting out part of bureau of inspection's report showing funds due district from defendant stated cause of action (Ohio Gen. Code, §§ 286, 286-1.).—Graves v. Board of Education of Sylvania Village School Dist., 157 Northeastern Reporter, 766, Ohio App.

Teachers

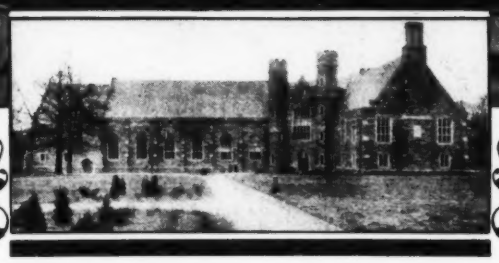
A teacher cannot be appointed in public schools without a certificate from the State Board of Education.—Gauthier v. St. John the Baptist Parish School Board, 5 La. App. 570.

A parish school board must select teachers from nominations by parish superintendent (Act No. 100 of 1922, § 20.).—Gauthier v. St. John the Baptist Parish School Board, 5 La. App. 570.

(Concluded on Page 76)

PHILIPS MEMORIAL AUDITORIUM, WEST CHESTER STATE NORMAL SCHOOL, West Chester, Penna.

Architects: Price and Walton *General Contractor:* Victor Gondos



SCHOOL FLOORS NEED NOT BE COMMONPLACE

In the illustration above, note the unusual character of the floor pattern. Light Sienna tiles set off by an occasional square in dark Sienna give the effect of lines of "stepping stones" running down the aisle. Over 20,000 square feet of *Gold Seal* Marble-ized Tile were laid throughout this new school building.

Like all other floors manufactured and installed by the BONDED FLOORS organization, these floors in the West Chester State Normal School have in addition to attractiveness those other qualities so essential in all school equipment – quietness, comfort and durability. In this installation the seats were screwed right down through the tiles. BONDED FLOORS, whether of linoleum or of cork-composition tile, are so soundly built-in that this can be done with perfect safety.

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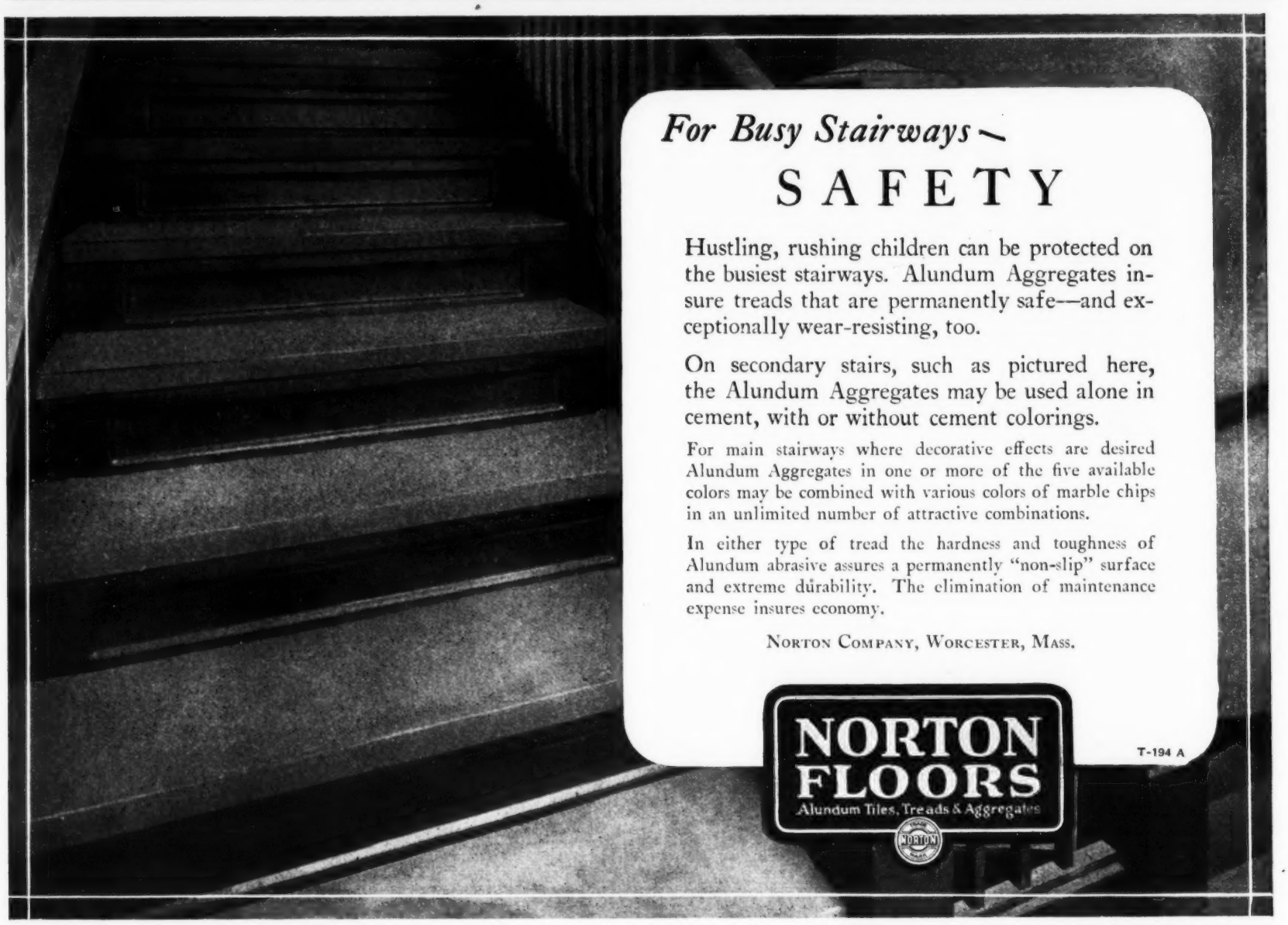
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On secondary stairs, such as pictured here, the Alundum Aggregates may be used alone in cement, with or without cement colorings.
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(Concluded from Page 74)

The principal of a school maintained by two parishes is subject to the school board employing him and cannot be enjoined from teaching by the board of another parish.—Parish School Board of Red River Parish v. McHaney, 5 La. App. 696.

An action for a breach of a teacher's contract brought before the beginning of a school term, is held not premature, in view of the district's repudiation of the contract.—Edwards v. School Dist. No. 73, of Christian county, 297 Southwestern Reporter, 1001, Mo. App.

A school district, in a teacher's action for breach of contract, has the burden of proving that the teacher obtained or might have obtained employment elsewhere, thereby reducing damages.—Edwards v. School Dist. No. 73, of Christian county, 297, Southwestern Reporter, 1001, Mo. App.

A school principal must sign and deliver graduation certificate to a pupil who has met every lawful requirement therefore.—State ex rel. Roberts v. Wilson, 297, Southwestern Reporter, 419, Mo. App.

Pupils

The right of children to attend a public school in the district is fundamental, and cannot be denied, except for general welfare (Mo. Constitution, art. 11, § 1.).—State ex rel. Roberts v. Wilson, 297, Southwestern Reporter, 419, Mo. App.

WISCONSIN SCHOOL LAW DECISIONS

The state education department of Wisconsin has ruled that an order signed by the wife of a school clerk, or the wife of a school director has no weight and the treasurer of a school district is not permitted to pay out money on an order so signed. Under the ruling, school-district officers may not delegate the power conferred upon them by statute.

Another decision of the department is to the effect that a school board which enters into a contract with a teacher for a specified sum at the beginning of the school year, may not increase the sum so specified upon a request of the teacher. Under the ruling, the board acts as the agent of the school district and must make a contract for the year.

A school-district clerk, under a ruling of the department, has no authority to buy repairs or supplies for the use of the schools without an agreement in regard to those repairs or supplies.

A teacher has control of the pupils on their way to and from school, and has power to regulate all matters occurring while children are on the way to and from school, according to a ruling of the state department.

The state department has also ruled that where a principal of a state graded school is incapacitated for performance of the duties required, the individual employed as a substitute for the time being must be legally qualified for the position. The salary of the substitute is such as may be agreed upon at the time the substitute takes charge.

Under a ruling of the state department, a school-board member may transport his own children to and from school and may receive compensation under the provisions of the school law. He may also enter into arrangements with the parents or guardians of the children and agree upon a compensation to be paid for transporting the children. The district will compensate the parents or guardians at the rate fixed by the school law.

Under the school law, it is required that a board of education shall be elected at the regular city elections in all cities of the second and third classes, and in those cities of the fourth class where the boundaries are coterminous with the city school district. Under the law, it is the duty of the board of education in these cities to hold regular monthly meetings, and at the time of organization, July 1, the board must elect a president and a vice-president. The board may use its discretion in selecting some other person than the city clerk as secretary of the board.

Under a new law, it is required that in the erection of school buildings, the cost of which shall exceed $1,000, the contract must be awarded to the lowest responsible bidder. So far as the erection of the buildings is concerned, the board takes over the powers and duties formerly assumed by the board of public works.

The state education department has ruled that it is the duty of a school-board member to attend the meetings of the board. If he does not do so, he should resign his office and permit the board to appoint someone to the position. It is pointed out that through continued nonattendance of a school-board official, the office practically becomes vacant.

Texas Textbook Law Defined

—The attorney general of Texas has been called upon to define the textbook law of that state. The opinion rendered contains the following paragraphs: "You are advised that it is obligatory on the commission, when a contract, the term of which is definitely fixed by statute, or the contract itself, is about to expire, to meet sufficiently in advance of the expiration of the contract and either readopt the old text or adopt a new text. If a new text is to be adopted, it must be for a definite period of not less than six years.

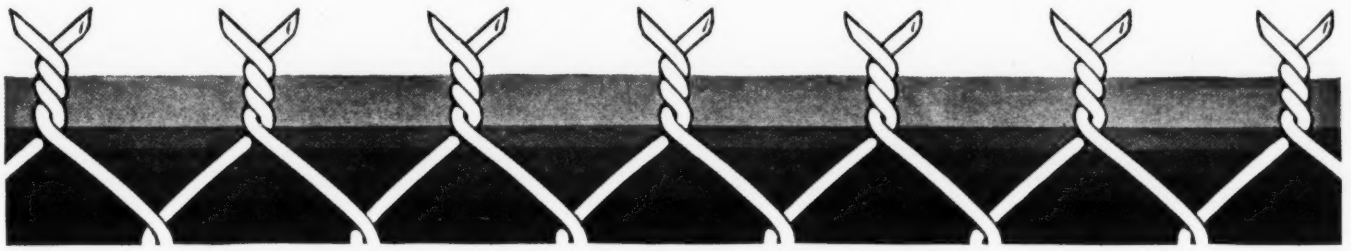
"If there are sufficient books on hand under an old contract for use in the schools, one, two or three years, or if financial economy dictates that the old text should be continued for either of these periods, it is obligatory on the commission to adopt the old text and make a contract with the publisher, if it may be done under the provisions of the law, for furnishing such number of new books as may be necessary for the schools of the state during the period desired, or the commission has the authority to renew the old contract for a period of not less than two nor more than six years if thereby it can secure 'as good or better books at a lower price than by making a different contract,' but in this event there must be a readoption for the period of the renewal."

LAW AND LEGISLATION

—Two school districts in Wisconsin were penalized recently for violating the law. District No. 1, town of Tripp, Bayfield county, paid its teacher $70 per month instead of $75. The state authorities withheld $347.60 from the district. District No. 5, town of Grant, Portage county, shortened the school term and was penalized $61.60.

—Mr. G. A. Gardner and the school board of Anderson, Ind., were recently made defendants in a suit brought against them by the Structural Slate Company of Pen Argyl, Pa. The suit was started to obtain payment of an account of $464 for material used in the construction of the Shadeland School.

—The court has recently ruled that the Grantsville school district near Hamilton, Mont., must pay to J. H. Veeder the sum of $1,200, with interest, for one year's salary as principal of the Grantsville School. Mr. Veeder was notified of his dismissal on May 20, and he sued on the ground that he became automatically reappointed when the board failed to notify him before May 1.



Should I Buy a "Cheaper" Fence?

PRICE is important — but what does it mean? When you buy a cheap fence what do you get for your money? Do you actually make a saving?

To determine the economy of any fence you must look beyond the price — to the multitude of parts and variety of materials that go into it. And, even further, to the way in which the fence is erected.

There are many methods of cheapening fence. Ways to cut corners, difficult to detect. Skimping on materials. Using pick-up parts. Omitting essential items. Side-stepping efficient erection practice.

Know your fence before you buy. Know how it is built and how it will be erected. Then, and only then, can you buy fence economically.

Near you there is a Cyclone representative who knows fence from A to Z — from the raw materials to the finished installation. He has operated fence manufacturing machines in Cyclone plants, studied fence engineering, worked on Cyclone erection crews, and supplemented this training with extensive experience in the application of fencing.

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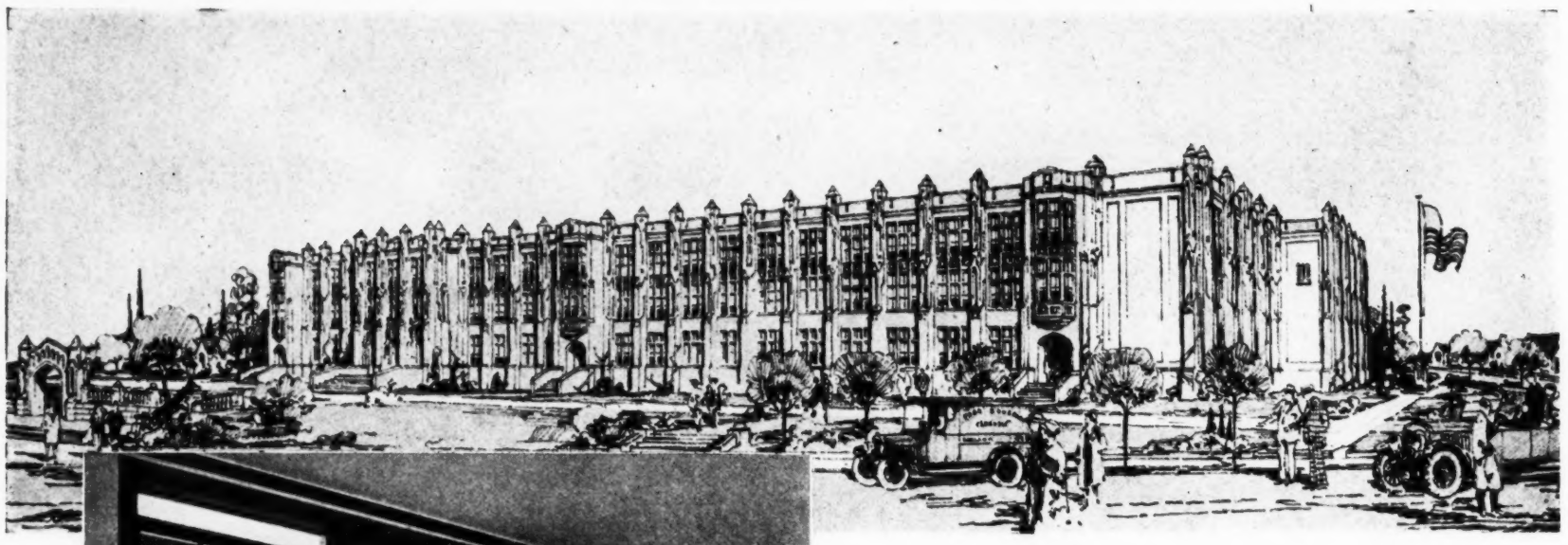
AWNING TYPE WINDOWS EXCEL FOR SCHOOLS



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SCHOOL FINANCE AND TAXATION

SCHOOL FINANCING SYSTEM IN ARIZONA

For several years it has been the custom under the state law of Arizona to handle all funds raised for the maintenance of the schools in three separate accounts: First, the general fund for the maintenance of the elementary schools; second, the high-school maintenance fund; and third, a special fund for the maintenance of kindergartens, and manual-training and home-economics instruction in the elementary schools. The last legislature made provision for the special fund for manual training home economics, and kindergartens to be included in the general fund for the elementary schools.

In July, 1927, a new form of voucher for the financial record was installed in the schools of the state by order of the state board of education. The seven general headings of general control, instructional service, operation of school plant, maintenance of school plant, auxiliary agencies, fixed charges, and capital outlay are the same as have been used for several years. The various items or subheads under the general heads have, however, been changed. The budgetary form give the following outline of general headings and subheading:

I. General Control
  1. Board and secretary's office
  2. Superintendent's office
  3. Supplies—general control
  4. Compulsory education
  5. Telephones
  6. Other expenses
II. Instructional Service
  7. Supervisor's salaries
  8. Principals' salaries
  9. Teachers' salaries
  10. Textbooks
  11. Supplies used in instruction
  12. Other expenses
III. Operation of School Plant
  13. Wages, janitor, and others
  14. Fuel
  15. Water
  16. Light and power
  17. Janitors' supplies
  18. Care of grounds
  19. Other expenses
IV. Maintenance of Plant
  20. Repair and upkeep of grounds
  21. Repair of buildings
  22. Repair and replacement of equipment
  23. Other expenses
V. Auxiliary Agencies
  24. Library salaries
  25. Library, other expenses
  26. Health service
  27. Cafeteria
  28. Other expenses
VI. Fixed Charges
  29. Rents
  30 Insurance
  31. Interest
VII. Capital Outlay
  32. Land
  33. New buildings
  34. Improvement of grounds
  35. Alteration of buildings
  36. Furniture and apparatus
  37. Other capital outlay
VIII. Manual Training
  38. salaries
  39. Other expenses
XI. Domestic Science
  40. Salaries
  41. Other expenses
X. Kindergartens
  42. Salaries
  43. Other expenses

NEW YORK STATE TO EFFECT CONTROL OF INCREASING SCHOOL COSTS

Governor Smith and the legislature of New York state have reached an agreement that an effort should be made at the present legislative session to solve the problem of financial control of education in the cities of the state. In his message to the legislature, the governor called attention to the fact that "the increasing expenditures for school purposes and the increasing costs for local municipal needs make it imperative that the problem be definitely and satisfactorily solved."

The main objective of the state officials is legislation that will clearly define the respective prerogatives of the municipal authorities and local boards of education in order that the differences between city and school authorities may be eliminated.

The present legislative action follows a report of the legislative committee on taxation which recently completed a state-wide survey of the increasing expenditures for public education and of the difficulties experienced in different cities in regulating such expenditures. It is expected that the committee will present its report early in the session and that it will stress the importance of the state's interest in the increasing demands upon the number of teachers in view of the policy of the state to assume a larger share of the cost of teachers' salaries in the several communities of the state.

SCHOOL COSTS STILL ON RISE

Expenditures for public schools are still on the increase but the rate of increase of teachers' salaries, which is the largest factor of cost, is gradually falling off, according to a statement issued by the United States bureau of education.

Statistics compiled by the bureau show that for 1925 the enrollment in public elementary and secondary schools of the various states included 24,650,291 pupils, of whom 3,650,903 were in public high schools. In 1900 the enrollment was 519,251 and in 1920, 2,199,389. The report discloses the fact that the salaries of public-school teachers are still on the increase, the average annual salary for members of the supervising and teaching staff having increased from $485 in 1910 to $871 in 1920 and $1,252 in 1925. The increase from 1920 to 1922 was about $148 annually, from 1922 to 1924 about $30 annually, and from 1924 to 1925 it was $25 for the year.

"This slowing up in the rate of increase would indicate," says the report, "that the peak in teachers' salaries is not far distant."

Wisconsin Schools May Not Receive Income Taxes Until July

The attorney general of Wisconsin has rendered an opinion in which he gives a negative ruling to a question as to whether credits can be transferred from the general fund for the amount which will be due the school tax fund from the proceeds of the income taxes prior to July 20.

The seven-tenths-mill tax levy, minus the $200,000 which must be paid from the general fund is $3,733,329. Of this amount, in round figures $900,000 must be taken from the income taxes to be paid to the state in July.

This leaves approximately $2,833,329, which may be transferred to the school fund from the general fund on March 2. This is sufficient to maintain the state's share of the common school maintenance until the remainder of the sum is available.

In commenting on the tranfers allowed for the common school fund, the attorney general points out that at some future time it may be necessary to secure the transfer of funds from the general

(Continued on Page 81)

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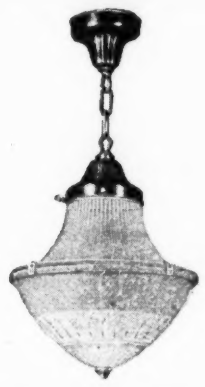

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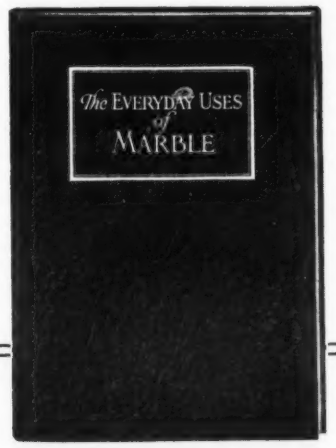

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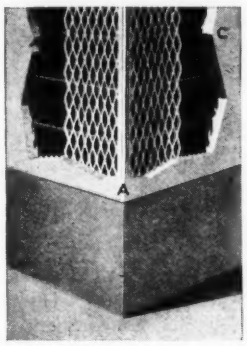

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(Continued from Page 78)

fund to the school fund in anticipation of the portion of the proceeds of the income taxes which may be necessary for the welfare of the schools. A law will doubtless be asked of the next legislature.

FINANCE AND TAXATION

—The Illinois state teachers' and retirement fund shows assets of $1,470,468. The cash balance for the year was $387,568. The tax allotment is $304,461. The fund paid out $596,153.67 in annuities. At present there are 1,584 teachers receiving benefits from the annuities—$400 yearly for the twenty-five-year teachers who have retired, and smaller amounts for those with lesser terms of service, or who have retired because of disabilities. One hundred forty-six teachers retired in the last fiscal year. Total disbursements for the year were $741,872, leaving a cash balance of $378,568 and a total balance, inclusive of loans, of nearly $1,500,000. Loans are made from the fund only on approval of the state treasurer.

—Alabama has in hand a campaign for a $20,000,000 bond issue for schools. The campaign committee is headed by Sidney J. Bowie of Birmingham. The Anniston *Star* says: "Not only is Mr. Bowie one of the ablest men in Alabama, a man who has made a pronounced success in both law and commerce, but he is at the same time one of the best friends the school boys and girls of the state have ever had."

—New York, N. Y. A total expenditure of $161,101,809 for public education in 1928 is authorized under the budget adopted by the board of education of New York City. Included in this amount is $35,000,000 for building and $14,000,000 for increases of teachers' salaries.

—Hartford, Conn. Mayor Stevens has taken steps toward reducing the high cost of education by proposing that the finance board consider reducing the equalization school tax to a degree that will provide each district with an incentive for trimming its costs to economy limits or bear the alternative consequences with mounting extra district taxes.

The mayor's suggestion is predicated on a phrase in the equalization law that the rate shall be levied to raise funds to meet school maintenance expenses which the finance board may deem necessary. The mayor has made the point that the high school costs are 25 per cent too high and that the city is getting only 75 cents on the dollar.

—Dayton, Ohio. Supt. Paul C. Stetson has adopted a retrenchment program which will reduce the operating expenses $527,000 in 1928. The defeat of a tax levy has made it necessary to reduce the expenses.

—Olympia, Wash. A statistical statement recently issued by State Supt. Josephine C. Preston shows that the cost of public education in Bellingham is below the average for the ten first-class school districts of the state, and that the taxpayers are required to pay less per pupil per day and per year than taxpayers of Seattle, Tacoma, Walla Walla, and Everett. Bellingham taxpayers pay 44.9 cents per pupil per day, or $80.92 per pupil per year. The following table shows the comparative average costs for the ten first-class school districts:

	Cost per pupil per year	Cost per pupil per day
Seattle	$102.98	$ .56.3
Spokane	100.73	.55.6
Tacoma	87.93	.48.6
Walla Walla	87.13	.47.1
Everett	86.41	.47.9
Bellingham	80.92	.44.9
Yakima	77.94	.43.3
Vancouver	68.50	.37.6
Aberdeen	68.18	.37.8
Hoquiam	63.48	.35.7

First-class district average cost per pupil per year, $82.42.

First-class district average cost per pupil per day, 45.4 cents.

The comparisons show that Bellingham pays $1.50 less per pupil than the average per pupil per year, and one-half cent a day less than the average pupil-per-day costs.

—Bellingham, Wash. The citizens at an election held on December 3, voted on a proposed millage of two and one-half mills for the erection of an eight-room school, and one of two mills for a sinking fund to be used for a school in 1929. The policy of the board has made it possible to extend a building program over a period of a year, to place the buildings where the centers of population have developed, and to pay cash for all buildings erected.

—The city board of estimates of Madison, Wis., has reduced the budget of the board of education by $50,000. The board had requested a budget of $1,004,792, or an increase of $85,241 over last year, when the total amounted to $919,850. By reducing the estimates $50,000, the board has allowed the schools a total of $954,792, or an increase of $34,942 over 1927.

—Lima, Ohio. The budget commission has fixed $592,450 as the school portion of the anticipated tax collections. The amount requested by the board of education for 1928 expenses was $676,510.

—Medford, Oreg. The annual school budget for 1928 calls for an expenditure of $199,260, as against $185,245 last year.

—Lima, Ohio. The school board has asked the state tax commission to grant a tax rate of $24.80 per thousand dollars of taxable property. An agreement had been reached for a twenty-cent reduction but the school board has now asked for the full amount allowed by law.

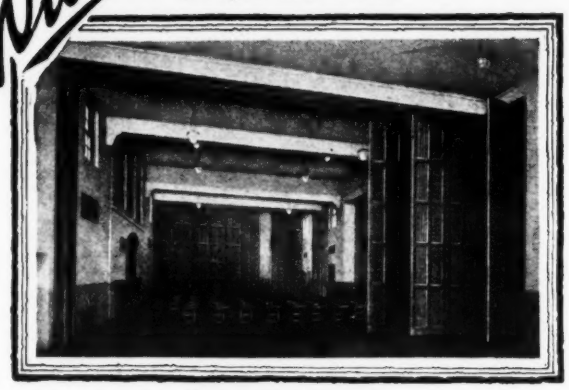
—Rockford, Ill. The school board has asked for an election to vote $2,000,000 through an increase in taxes for the financing of a five-year building program. The state law permits an increase of three eighths of one per cent tax levy for building purposes.

—Omaha, Nebr. The board of education has decided to borrow a million dollars in order to keep its business on a cash basis. The notes are four-per-cent short-term notes, which will be due on August 1, next.

—Minneapolis, Minn. A test will shortly be made of the relative authority of the school board and the board of estimate and taxation in the handling of school-building funds. The action is proposed as a result of a statement of the present situation by George F. Womrath, business manager of the schools.

Mr. Womrath points out that the customary procedure of the estimate board in the handling of school-building funds places the board of education in the position of being unable and helpless to make a single move without the approval of the board of estimate and taxation. He holds that after the first three steps in the regular procedure have been taken, the board of education should be free to proceed without any further reference to the board, provided no bids are approved and contracts let in excess of the amounts allowed by the estimate board.

Many rooms into one



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—Supt. H. A. Perrin of Joliet, Ill., has presented a report to the school board in which he asks that the city go before the voters for an increase in the tax levy to provide additional school revenue. Mr. Perrin points out that the levy of 75 cents for building purposes, and $2.00 for additional purposes, or a total of $2.75, is not sufficient for the present school purposes.

—"Spokane county, Washington, has spent during the past year $56,000 for school transportation," said F. W. Yeager, superintendent, in a recent public address. "In the Mead district, with an average daily attendance of 163, $9,000 was paid for transportation, and Amber district, with 66 students, paid $5,000. King county paid $135,000, Washington paid $1,333,000, while the entire United States paid $40,000,000, and the end is not in sight.

"Transportation began to figure prominently when consolidation of school districts started. It is conceded that transportation by bus is better than horse-drawn vehicles and that the student thus transported is able to do better work in the schoolroom."

—Cripple Creek, Colo. The school authorities with the cooperation of the local physicians, recently completed a campaign of immunization against scarlet fever. The next program will be the immunization of children against diphtheria.

—Mr. R. M. Sealey, formerly state high-school inspector in Florida, has been elected secretary of the Florida Education Association, with headquarters at Tallahassee.

—A surprise birthday dinner was given by the school committee of Newport, R. I., on December 3, in honor of Dr. Herbert W. Lull, superintendent of schools. Dr. Lull was presented with a bound volume of Ludwig's Napoleon. The entire twelve members of the board were present to do Dr. Lull full honor. Dr. Lull who has attained the ripe age of 75 and is hale and hearty, has completed 27 years as city superintendent of schools.

—Cincinnati, Ohio. The board of education has adopted a policy not to approve the distribution of material through the schools, except for such educational purposes as may originate with the board, or which may be approved as clearly educational in character, and which shall be free of all personal, political, or commercial interests.

EDUCATIONAL ATTAINMENTS OF CHILDREN REGULARLY EMPLOYED IN 1926

Miss Grace Abbott, chief of the children's bureau of the U. S. Department of Labor, in her annual report for the year 1927, shows that in 1926, 107,257 children of 14 and 15 years of age received first regular employment certificates in 1926, which is an increase of five per cent as compared with 1925. Nearly two fifths, or 38 per cent, of the 90,046 children whose ages were reported, went to work for the first time when they were 14 years of age. The influence of a high-grade requirement for the issuance of employment certificates is indicated by the fact that the proportion of children going to work at 14 years of age was more than twice as large where there was no eighth-grade requirement as it was where this restriction was in effect. Of the 42,949 children to whom certificates were issued in four states and seven cities, where the educational requirement was less than graduation from the eighth grade, 56 per cent obtained first regular certificates at the age of 14, as compared with 24 per cent of 42,786 children in three states and six cities where graduation was required without exceptions.

The educational attainment of children is affected by the educational requirements for employment certificates set up by the state. In Indiana and Minnesota, for instance, in which the eighth-grade standard was in effect for children 14 and 15 years of age, practically 100 per cent of the children had actually completed the eighth grade. In four states and thirteen cities having less than an eighth-grade requirement for both 14- and 15-year-old children, it was shown that 49 per cent of the children receiving certificates had completed or last attended the eighth or a higher grade, and that 22 per cent had not advanced farther than the sixth or a lower grade.

A study of the occupations of the 34,034 children who received employment certificates shows that 46 per cent of these children entered manufacturing or mechanical industries, 30 per cent went into mercantile establishments, and 25 per cent into other employment.

The records of work permits issued to children between 14 and 16 years of age in the places reporting to the bureau are representative of conditions in most of the important child-employing centers as regards the legal employment of children of work-permit age. The number of first regular certificates issued does not indicate the total number of children at work at any given time, but only the number beginning work during a single year.

STATE AND COMMUNITY

In a democracy education is considered a state function, but it should not, of course, become a state monopoly. The responsibility for education is vested in the state, but every community is likewise interested and should have an opportunity to express itself in its own way and according to its own needs. Such a conception of state responsibility must guide the endeavors of those intrusted with the improvement of instruction through centralized examinations and inspections.—Frank P. Graves, Commissioner of Education for New York.

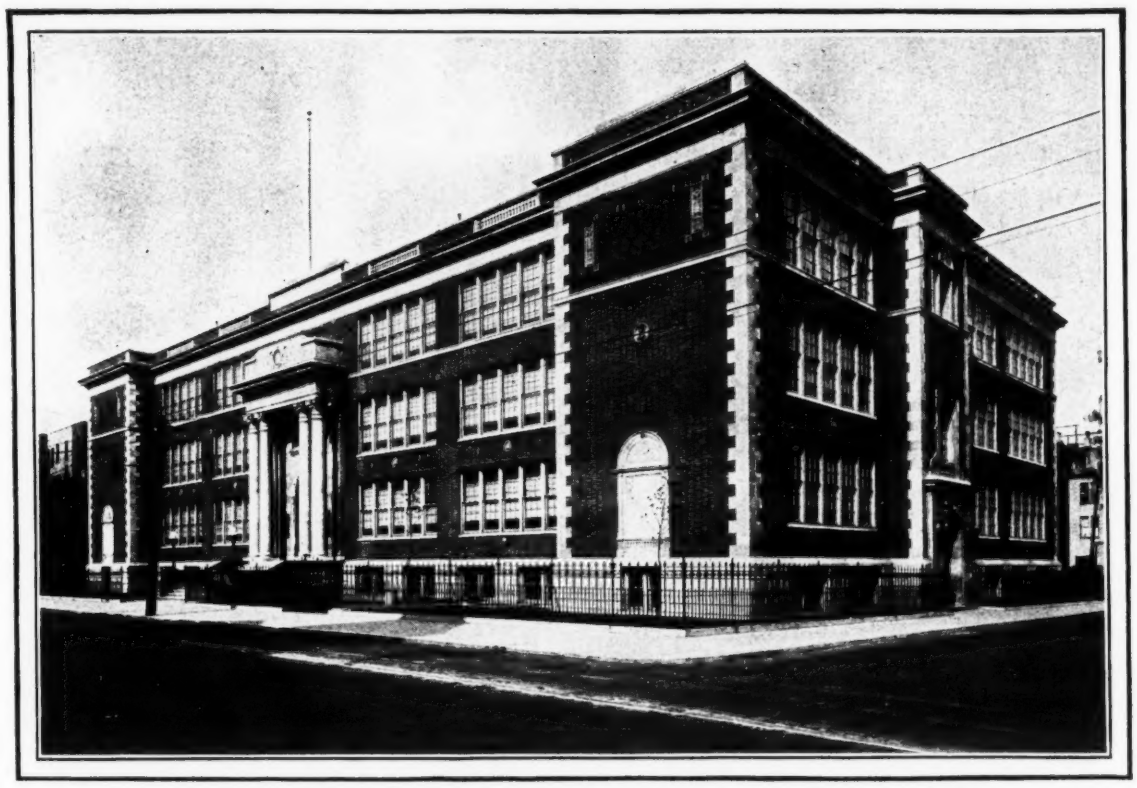
SCHOOL DIRECTORS OF EASTERN COLORADO MEET

The school directors section of the Eastern Colorado Educational Association held a meeting on November 10, in the North Denver High School, with an attendance of thirty directors from nearly all parts of the state. Pres. E. G. Smith presided at the sessions.

Mrs. Clara B. Smith opened the meeting with an interesting paper entitled, "Better Teaching." Mr. R. B. Spencer of Ft. Morgan, who followed, talked on "The Selection of a Teacher." Prof. H. M. Barrett of Boulder, discussed "The Proper Use of the School Funds of the District." Mr. Luke Smith of Trinidad, was next, with a paper on "The Advantage of Employing a Teacher of the Local Community." Mrs. Cook talked on the authority which the superintendent should have in the selection of the teachers. Mrs. Janet B. Johnson of Walsenburg, gave suggestion regarding the duties of school superintendents, and Mr. A. E. Dickerman of Leadville, described his plan for the purchase of school supplies. Plans were perfected for a membership drive to cover the state.

The meeting closed with the election of officers for the ensuing year.—*C. Seltzer.*

The NATION'S BUILDING STONE



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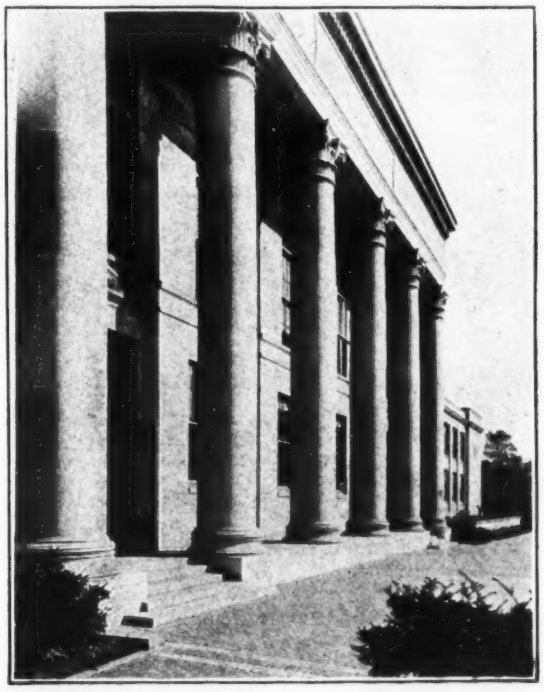

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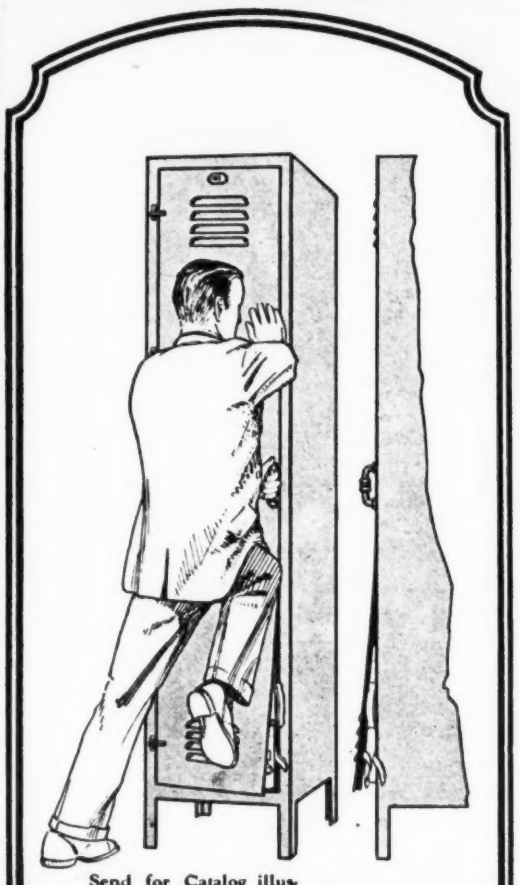

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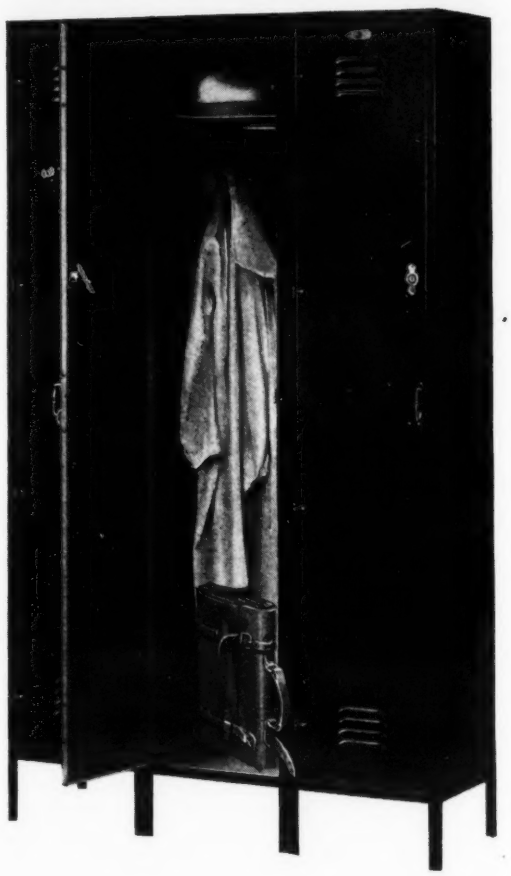

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SCHOOL ADMINISTRATION NOTES

A BULLETIN ON SCHOOL SUPERVISION

Mr. Glenn K. Kelly, superintendent of schools at Houghton, Mich., recently sent the following bulletin to all the teachers in the schools. The bulletin was originally prepared as a report to the board of education but it was so favorably received by the school people and the public that it was put into form for general distribution in the schools. The bulletin is as follows:

School Supervision

Inspection of Work in Various Departments: After the work of the various departments of the school system has been organized and duty, responsibility, and authority delegated to various subordinates, it becomes the duty of the chief executive officer to supervise and evaluate the work of all employees. One method of evaluating the service rendered by the various departments is inspection. The details of inspection vary according to the amount of supervisory and inspectorial authority delegated to assistants.

The part played by inspection in evaluating and supervising the work of the various departments of the school system is that of furnishing information concerning the extent to which the detailed policies of the administration are being properly executed. The inspectorial duty of the superintendent, or any of his staff, is a duty with positive objectives. The teacher inspects the work of his pupils primarily to ascertain the extent to which they have profited by his instruction. The negative results discovered by inspection are only incidental. It is an established psychological fact that pupils do better schoolwork when given encouragement and reward. School marks, if of any value at all, serve as a reward for service. The teacher who always points out the child's failures fails to stimulate him to his best efforts and thus bring about the proper development of his powers. No normal child is so poor in scholarship and character that for each shortcoming the teacher can not find a trait worthy of praise. The teacher who fails to do this fails in his inspectorial duties.

Noting the Success of Pupils and Teachers: In the performance of his inspectorial duties the school principal must likewise be alert to see the phases of work wherein his teachers and pupils are succeeding. To see only the phases of the work which are unsatisfactorily performed is a reflection on his intelligence and qualification for his position of responsibility. The principal who is quick to recognize and give credit for meritorious performance of duties by his teachers and pupils is best prepared to criticize unsatisfactory work. His criticism will not only be more gladly received but will be received with confidence by teachers and pupils. The recipients of his criticism know that in the performance of his inspectorial duties he has seen both worth and shortcomings in their work. Therefore they welcome his visitations and respect his opinions.

Recognizing the Worth of School Officials: What has been said with reference to teachers and principals applies equally well to the superintendent and his staff up through school board, state school officers, and ultimately to the public. It is becoming less popular to point out only the faults in the public schools.

It is an established fact among those well informed concerning education that best results in schools are obtained by the positive recognition of worth and merit. It is not to be inferred that faults in children, or faults in schools, are to be ignored; they must be pointed out and corrected but the one who takes a positive attitude in evaluating the functioning of any phase of the school system, whether as lay citizen, school official, or teacher, will not only be overwhelmed with the amount of merit he finds in the schools and the children but will be in position to make intelligent criticisms.

GLENN K. KELLY, SUPT.,
Houghton, Mich.

"COPPETTES" OR JUNIOR TRAFFIC POLICE.

The safety bureau of the Chicago school system is training girls whose duty it will be to see the smaller children safely across the streets. The above shows a "coppette" cautioning a small school child. (Photo International Newsreel.)

"EUREKA PLAN" IN SACRAMENTO

—Sacramento, Calif. With the opening of the second semester on February 13, the high school has put the "Eureka Plan" into actual operation. The plan is designed to prevent students of marked ability in a subject being slowed down because other students are not so apt in the particular study. It also enables the slower students to get more out of a subject than if some quicker students were present and assumed the burden of the recitation.

The plan requires that pupils be assigned to classes according to their subject ability. In algebra, for instance, instead of running three or four

(Continued on Page 86)

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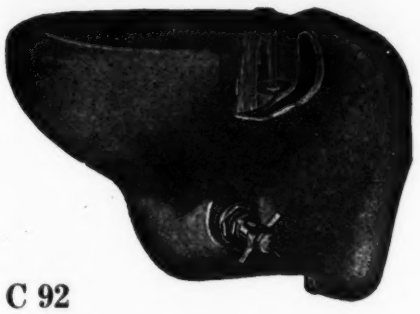

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(Continued from Page 84)

mixed classes, there is one class for pupils of exceptional ability; another class for those of medium ability, and still another class for those who are slow in the particular subject. This plan does not require any more teachers, but it does mean greater efficiency for all pupils concerned. Failures in classwork mean a pupil must repeat the subject and this requires extra teachers.

The plan does not mean that a student who is in a slow-moving class in one subject must be in slow-moving classes in all subjects. His proper speed is found for each subject and he is moved to a more rapidly moving class as he develops speed. In addition to giving every student a greater chance for instruction in each subject, it also proves economical in the operation of schools by reducing the number of failures in classwork.

SURVEY OF MASSACHUSETTS SCHOOL TERMS

The state education department of Massachusetts has completed a study of vacation periods, semiannual promotions, and entrance age of first-grade pupils in the state.

In the study of vacation periods, it was found that the eight-week-term plan is followed in 35 of the 39 cities. The plan involves one term of 16 weeks in the fall, followed by three 8-week terms with vacation periods in December, February or March, and in April or May.

In Marlborough, the plan is used in the elementary schools but not in the high schools. In the following four cities, the longer term with two vacation periods, at Christmas and Easter, is maintained—Fall River, New Bedford, Medford, and Waltham. Of the 198 towns reporting, 151 follow the 8-week term plan.

In the study of semiannual promotions, it was found that only 8 towns and cities now give semiannual promotions. They are Worcester, Springfield, New Bedford, Quincy, Pittsfield, and Malden in the junior and senior high schools; and Athol and Easton in the grades. A total of 39 cities and 231 towns reported on the plan. It was found that 31 towns and cities have an admission of age of 6 years for first-grade pupils; 27 towns and cities have an admission age of 5 years, 9 months; 62 have an admission age of 5 years, 8 months; 70 have an admission age of 5 years, 6 months; 49 have an admission age of 5 years, and 13 have an admission age of 5 years, 5 months.

The admission age to kindergartens is 4 years in 6 towns and cities; 4½ years in 14 towns; 4 years, 8 months in 4 towns; 5 years in 9 towns; and 4 to 6 years in one town. There are 45 cities and towns maintaining kindergartens, with a total attendance of 23,824. The total number of kindergartens is 557 and the total number of teachers employed is 804.

THE VALUE OF HOMEWORK AS COMPARED WITH SUPERVISED STUDY

Mr. Henry H. Hagen, principal of the Cameron School, Chicago, in the latest yearbook of the Chicago Principals' Club, discusses the value of homework as compared with supervised study. He points out that homework for pupils in the elementary grades has two strong advocates—parents who want to help in controlling children at home instead of providing activities themselves, and teachers who feel that educating children is merely filling the mind with facts.

What educational value has the usual homework in the different subjects? Because of the objections from parents, the teachers in the six classrooms were willing to test the value of homework as compared with supervised study. The grades selected for the study were 6A, 6B, and 7B. The number of pupils involved was about 275 and there were two rooms to each grade.

The Otis intelligence tests, the school marks for the previous semester, and the Illinois examination were used for the purpose of equalizing the grades according to mental ability. Standardized tests were then administered in arithmetic, reading, and geography.

In the homework rooms, each teacher required homework for each subject tested—checking homework was the first matter on the program each morning. No effort was made to influence the method used at home in studying the material. It was the desire to find the value of the homework as carried on in most schools.

In arithmetic the homework consisted of ten exercises. In reading, regular lessons were assigned for homework. Written questions and outlines were required. In geography, the homework consisted of informational and problem material assigned in textbook form.

In the supervised study rooms the pupils were given no definitely assigned homework. Books were suggested for voluntary reading. Each pupil read books from the library and a list of good books was posted in the rooms. The study periods for the three subjects were 45 minutes in length. These were divided according to the judgment of the teachers in charge of the rooms. Usually the division was 20 minutes for study and 25 minutes for recitation. Suggestions for methods of study were given by both teacher and principal and guide sheets were placed in the hands of all pupils.

In the test on fundamentals of arithmetic, the gain of the homework group over the supervised-study group was .73; in arithmetic problems, there was a net gain of .68 in favor of supervised study; in geography problems, there was a net gain of 1.20 for supervised study, while in factual information there was a net gain of 1.34; in the test in reading there was a net gain of .26 in favor of supervised study.

The results attained by the two groups of pupils is generally in favor of the one which followed the supervised-study plan. The time and effort required in forcing homework from pupils seems to be unwarranted. Required homework leads to dishonesty, for during the period of study many pupils were seen copying the work of those who had conscientiously prepared it.

THE WORK OF THE RESEARCH DEPARTMENT AT ST. PAUL

The chief purposes of the work of the division of research, as outlined at St. Paul, Minnesota, are to determine how well the pupils are progressing in their schoolwork and to assist the principals and teachers in placing each pupil in the proper grade.

The requirements of the course of study have been evolved through a period of many years of observation of the average ability of children. The more careful investigations of recent years have established and emphasized the fact that pupils of the same age may differ widely in ability. The plan of advancing pupils one grade each year has resulted in advancing some pupils to a grade of work quite too difficult for them, while others of superior ability were not acquiring the valuable habit of application. Most of the "problem" cases have been found to occur in these two extreme groups. Research methods have helped in selecting those who need special help or placement in another grade.

(Concluded on Page 88)

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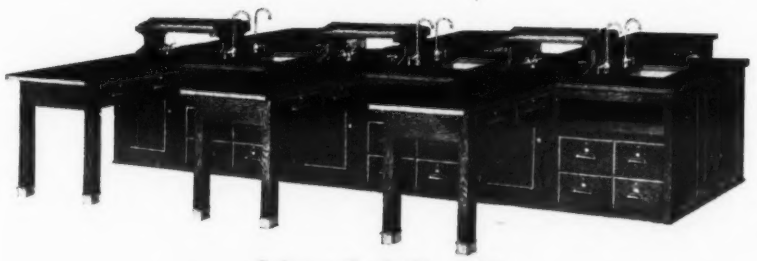

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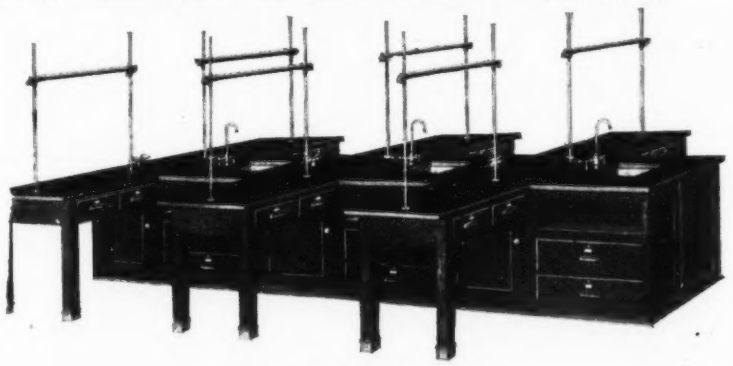

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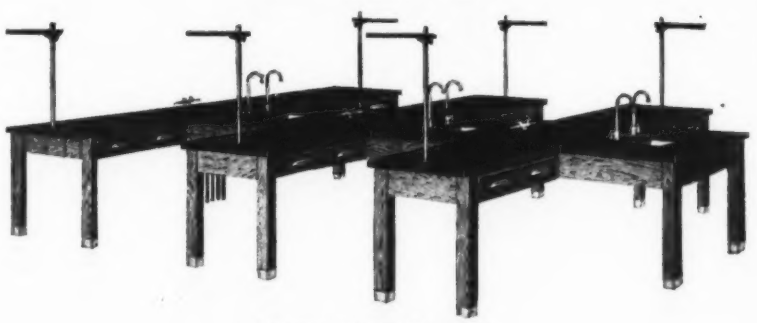

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(Concluded from Page 86)

Under the system established, a physician makes a diagnosis with standardized instruments before prescribing the remedies. Research methods require the use of standardized tests rather than the old-type examination questions.

To standardize a test it must be given to a large group of pupils and their scores tabulated with regard to both age and grade. For instance, the scores of 12-year-old pupils vary widely but the median (middle) score of the range is properly taken as the standard. The median score of pupils of each year of age is likewise carefully determined. The median scores form a series of age standards of ability. Grade medians also furnish standards. After standardization, a pupil's test score becomes a reliable measure of his ability with respect to other pupils of his age and grade.

Near the close of the last semester a group of tests were given to pupils in grades three to eight, inclusive. The subject scores of each pupil and his total score were placed on an age chart which showed both the age and grade value of each score. The results were tabulated into five groups, i.e., very superior, superior, average, inferior, and very inferior.

Pupils who made a rating of five half grades above the grade in which they were working were promoted an additional half grade. Those standing four half grades above were individually considered for an extra promotion. The records are checked to show the school's relation to standards, and to furnish a city-wide basis for determining the ability of a pupil.

Group intelligence tests were also given to pupils in the 3B and 6A classes. The tests measure the native ability of a pupil just as the educational tests show academic attainments. Through these results pupils entering the junior high schools are given a percentile rank so that they may be placed in groups of approximately equal ability.

The achievement tests show the subjects in which the classes have been above or below the accepted standards of attainment. Supervisors and teachers have made definite and repeated use of these factors in directing teaching. Better methods of class instruction, of individual help, and of grade and class placement to meet known difficulties have raised the level of achievement. During the last ten years there has been a gradual and steady improvement of grade medians in achievement.

SCHOOL ADMINISTRATION

"The United States Bureau of Education is in need of more funds for printing purposes and for research work," says Commissioner John J. Tigert in a report to the Secretary of the Interior. Dr. Tigert recommends enlargement of research facilities in the bureau, and expansion of the work in Alaska. He asks that a specialist be placed in charge of the reindeer industry there, and that the government consider the possibility of transferring the health work to the Public Health Service.

In reducing school costs there is a tendency to curtail or eliminate night schools, reports L. R. Alderman of the United States bureau of education. The evening school is not yet an established part of the regular school system in many cities, and therefore the budget is uncertain, the term short and the pay small, according to Mr. Alderman, who says that Gary, Ind., and Buffalo, N. Y., the two cities reporting the highest percentages of their adult population in evening schools, estimate that the cost of maintaining a full evening program is not more than five per cent of the cost of the day schools.

—Supt. W. J. O'Shea of New York City has received a report from the police department showing that there has been a reduction of 25 fatalities and 325 injuries to children of 16 years of age and under due to vehicular highway accidents in the city. The number of fatalities to children for November this year was smaller than for any November during the last five years, and the number of injuries was smaller than for the last three years. The reduction is considered remarkable because of good weather conditions which gave children more days to play outside and which increased the accident hazards.

The report shows that there were 15 killed and 673 injured on the avenues and principal thoroughfares during November, and 13 killed and 208 injured on the side streets. This is a decrease of 20 fatalities and 228 injuries on the avenues, and a decrease of 3 fatalities and 97 injuries on the side streets.

It is also shown that 35 per cent of all accidents to children occurred to children under 7 years of age, with 12 killed and 308 injured, and 35 per cent to children of 7 to 10 years, both inclusive, with 11 killed and 306 injured. The largest number of injuries to children were due to careless crossing at street corners, and to play in the streets. The largest number of deaths were attributed to running off the sidewalks into streets and to disregard of traffic lights at crossings.

About 32 per cent of the accidents occurred between 9 a.m. and 4 p.m. and between these hours increased about one per cent in November. Four per cent of the accidents occurred before 9 a.m., a decrease of one per cent compared with October.

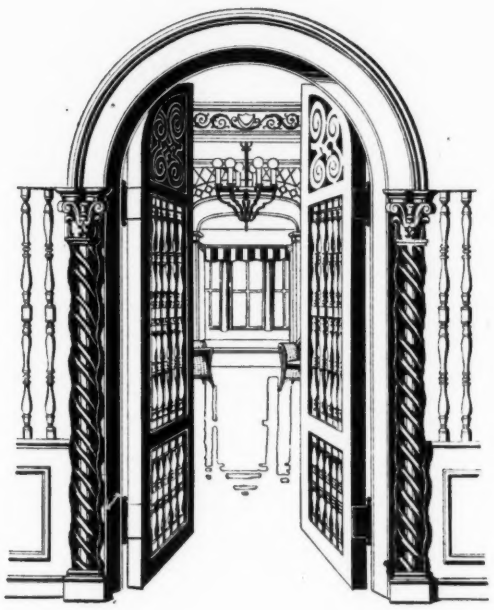
—The annual report of the board of school commissioners of Baltimore, Maryland, for the school year 1925-26 shows that the enrollment of the city schools increased 39 per cent during the past ten-year period. From an enrollment of 79,599 in 1916-17, the number of pupils has grown to 110,315 in 1925-26, or an increase of over 30,000 pupils.

The report also shows that 8,700 pupils withdrew from the public schools for white students during the school year 1925-26. This number was exclusive of the 4,604 who were on the June, 1925, roll and failed to enter in the following September, and the 1,230 who graduated from the senior high schools. Of the number who withdrew, 35 per cent left to enter employment, 33 per cent removed from the city, 11 per cent left on account of illness, and 10 per cent transferred to other schools.

The figures reveal that children are remaining in school longer and are attending school better than they did ten years ago. During the ten-year period the enrollment increased 38.6 per cent, while the net roll increased 53.5 per cent. Further, the increase in average daily attendance was greater than the increase in average daily net roll by 5.2 per cent. The proportionate increase in the rate per cent of attendance over those for enrollment and net roll is positive proof that children attend school more days now than they did ten years ago.

It is a fact that more children are attending high schools than ever before. The number of white pupils on net roll has increased from 23 per cent to 30.9 per cent. In the colored schools there has been a similar increase from 14.1 to 22.6 per cent.

—Acting Superintendent Wm. J. Bogan of the Chicago Schools, has notified all principals that bookmen and representatives of firms which sell school supplies are forbidden to interview teachers. Mr. Bogan requests principals to select books from the pedagogical library at the offices of the board of education.



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The Selection of High-School Textbooks*

H. E. Dickerman, Seattle, Wash.

There is little necessity to dwell upon the importance and need of intelligent, careful selection of textbooks. The argument is often advanced, and the layman frequently has the idea, that a teacher should have such complete mastery of his subject that the textbook used would be of only secondary importance. This would indeed be the ideal situation, but we know only too well how far we fail in the realization of this ideal. Many an excellent teacher would become a poor teacher if deprived of his text. Thoroughly capable of a good clear representation of his subject, and capable of generously supplementing the textbook content, he may be entirely incapable of proper organization of a complete, well-balanced course without a text. This refers only of course to experienced teachers. How much more must the inexperienced teacher lean upon the textbook. In general, then, the excellence of the teaching job done, having the textbook as one of its factors, will be directly proportional to the excellence of the textbook used.

Importance of Careful Textbook Selection

Before proceeding to a discussion of methods in making an intelligent selection, I should like to mention a few factors which are sometimes considered pertinent but which should not be given undue weight, nor allowed to overbalance other more important elements. First of these is the prestige of the author, either as an authority in his field or as a scholar. This might well be made the deciding factor in the selection, other things being equal, but not otherwise. The most eminent scholar, or an accepted authority, may be a person who is entirely unfitted in other respects, to write a treatise satisfactory for the use of children. The mere fact that he is an authority may handicap him in the writing of a text, making him less able to get the viewpoint of the novice. This refers, of course, to the prestige of the author as a scholar. Prestige as the writer of textbooks in a certain field is another matter. This can safely be given a great deal of consideration.

Another argument which is often accorded more weight than it deserves, is that a text is being widely used. A great array of cities and towns and hamlets in which a text is used may be presented in sales literature. Some of the cities mentioned may be making only limited use of the text, possibly only a trial. Even if this were not true, a wide use need not necessarily mean that a textbook is superior. A book may be widely used long after its usefulness has started to decline. Books are not often changed until administrators are sure that they have found another book which will better fit their needs. Even when unsatisfactory, textbooks are not always immediately discarded, often for financial reasons. Not a few texts are in use in cities, where, if a selection were to be made at the present time, they would receive no consideration whatever.

The elements which I have just mentioned should be considered, of course, but care must be used to see that they do not dominate the selection. This danger does not exist so much, I believe, in the case of the other factors I am about to mention.

Procedure in Selection of Textbooks

First, standards must be applied to the content and organization of the textbook, to determine whether or not it meets the particular need of the user. A text must be examined for accuracy and reliability of material. This is a phase of the selection which can practically be disregarded if the author is a real authority on his subject.

A mathematics text, and to some degree, a science text, must be closely examined to see if the author has been consistent and conventional in his notation. Any text should be examined for logical organization of material and also to determine whether or not relationships which should be brought out, have been presented in such a way that the student will see the connections.

Some texts, particularly histories, must be scrutinized to see that the viewpoint is not dogmatic or biased. A historian who is prejudiced as to political parties for example, may easily discuss the tariff in such a way that only half the truth is given.

Then, the amount of material needs to be checked carefully. Many texts have contained a too meager amount to be most serviceable. The development of new topics may be adequate but it may be accompanied by a too limited amount of drill material to gain a requisite skill and properly fix the processes involved. It is often contended that an inadequate amount of material may be supplemented by the teacher. This seems reasonable at first thought and it is true, of course, that a well-prepared teacher could supplement and does supplement any text, but in far too many cases it is not done.

Careful attention should be given the illustrations of a text. Modern, progressive publishers are going to great expense to place high-grade illustrations in their product. This may, of course, be overdone, particularly if it is done at the expense of a suitable amount of subject matter. It is said that in certain late series of books the illustrations cost more than the manuscript.

Another set of elements often overlooked in the consideration of a text are helps, such as selected lists of references, charts, diagrams, and suggestions of method, which will be of value to teachers.

The reputation of the publishers must be considered, not as a major factor, but knowledge should be had concerning their ability to live up to a contract, their reputation as to fair dealing and willingness to make reasonable adjustments, and as to their habit of turning out a product which stands up under the usage given a school textbook.

The date of copyright should be an element in the selection. Educational progress is being made so rapidly that textbooks in many subjects soon become obsolete unless kept up to date by revision. When books are selected for a period of years it is essential that the book shall represent the latest thought.

Several phases of the mechanical construction must be gone into. First, a rather intangible element, is the general appearance or attractiveness of the book as a whole. Several factors enter into this: the artistic balance or proportion of the parts, the cover, the kind of type, the kind and number of illustrations, size of the book, number of pages, quality of paper, etc.

A durable binding is a prime essential in the construction of a text. A person not acquainted with the bookbinders' art and with qualities of paper is at a loss to determine whether a binding is good or poor. Information on the satisfaction given by books put out by a particular publisher in the past is very helpful.

The type used should receive attention. This is being given far more attention in present-day adoptions than it was formerly. A few scientific investigations have been made regarding the size and proportion of type, and the length of line most easily read.

It is rather well established that certain type sizes and type families cause the least eye strain. A very thorough study of this nature is presented in the chapters on "The Hygiene of Reading," in a volume by Huey entitled, "The Psychology and Pedagogy of Reading."

Committee Procedure in Selection of Textbooks

To make a really impartial and intelligent selection, an exhaustive examination and comparison of the books to be considered, must be made by the members of a committee of teachers. It is a big undertaking, though each one of all the books available need very quickly to be of a type not desired. Teachers of a subject

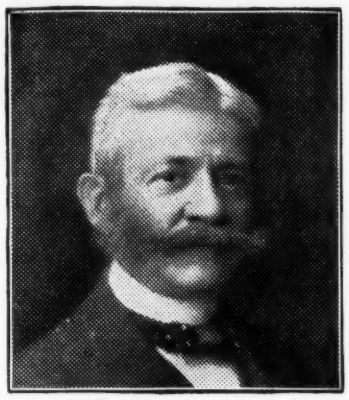
(Continued on Page 93)

SCHOOL CHILDREN'S HEARING TESTED.

Marie A. Pless of the New York League for the Hard of Hearing is making a test of the ear-power of children. A machine is employed which tests 40 children at one time and will spot the defect which may afflict a child. (International Newsreel Photo.)

*An address delivered before the Department of Secondary Schools, Western Washington Education Association, on October 27, 1927.

Holden Book Covers



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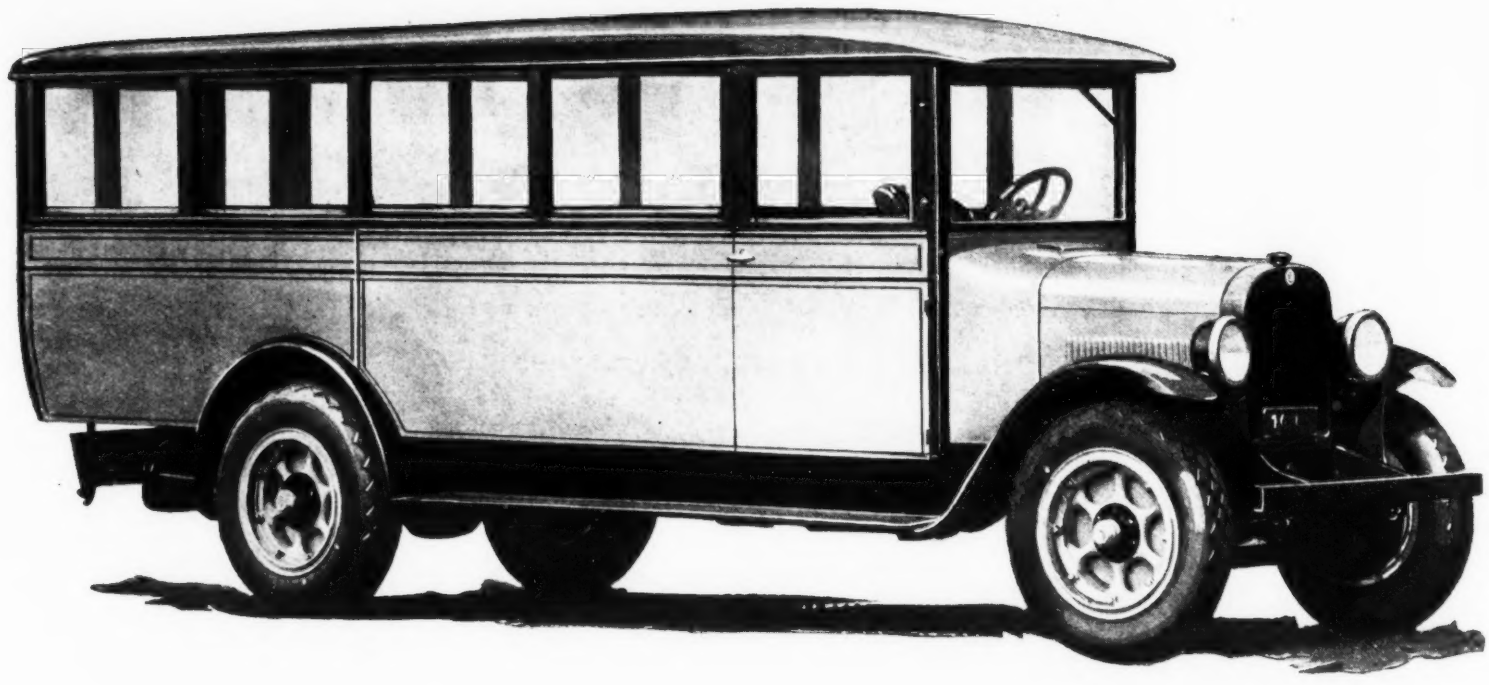

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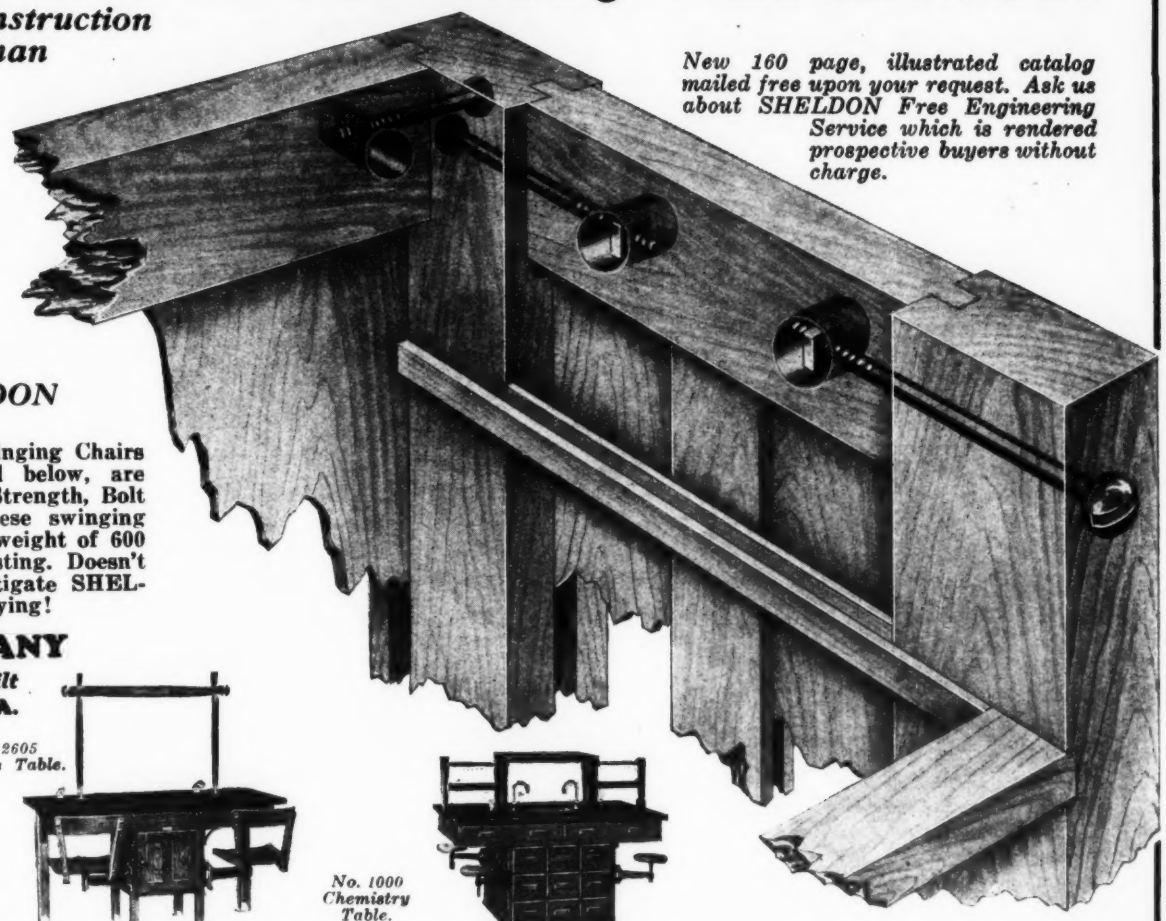

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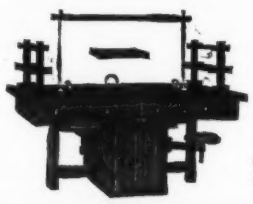
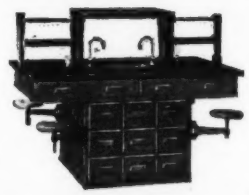


No. 1080 Combination Chemistry and Physics Table.

No. 2605 Physics Table.



No. 1000 Chemistry Table.

(Continued from Page 90)

should know in advance something about the desirable texts in the field. Dr. Judd makes a well-founded criticism of most teachers when he says that they are not up to date in the matter of being familiar with newer textbooks on their subject. He says that when we come to select a textbook it is a matter of administering an emergency, that we have a big ceremony of securing information which should already have been made part of the equipment of progressive teachers, whereas a selection should involve nothing more than a careful final comparison of the already known apparent merits and demerits of various books. This is the ideal condition, of course, but is not the condition actually encountered when a selection is undertaken.

The examination should be placed upon a scientific basis. Most selections are not. An interesting and probably somewhat accurate account of the usual procedure of most administrators as they approach the choice of a textbook, is given in the last issue of *The School Review* by Edwin J. Dahl in an article on the selection of a textbook in the social sciences. It is as follows: "The book is opened to the table of contents for an examination of the chapter titles. The pages are then turned in an attempt to ascertain certain of the contents. If the individual is especially interested in a certain phase of the subject he looks over that particular section of the book more carefully. He probably also makes note of the pictures and of the total number of pages. If a salesman is present, he calls attention to a few of the salient features, or, some recent advertising may cause a search for the items advertised. The book is then turned over to a teacher or some teachers, and the same process is very likely repeated. If several textbooks are under consideration, the question is asked, 'Which do you think is the best?' The answer is, 'I think I favor the book by Blank.' If most of those concerned think that Blank's book is the best, that is the book finally selected."

Such a method of procedure might result in a decision to take the book really most desirable for the particular need, but it certainly cannot be said to be a scientific selection.

One committee procedure, dealing with the selection of a mathematics text, which the writer had an opportunity to observe, was that of giving each member of the committee one book of the narrowed list under consideration and having him make a complete inspection and report. This method is open to several criticisms. It is almost entirely subjective. The merit of a book, as reported, will depend very largely upon the ability of the person making the report to make a good analysis and report, as well as upon his interest in the project as a whole, and upon his interest in the book he has been assigned.

Somewhat the same criticism may be made of the method of having each member of the committee look over all of the books in the narrowed list. Here again the book favored by the committee member who is best able to argue its advantages is the one likely to be selected.

Another thing that must be guarded against with this sort of procedure is a compromise selection. Various members will favor certain books so strongly and hold other books so strongly in disfavor that in order to come to an agreement the best book is disregarded and an adoption is made which does not satisfy anyone.

The first essential in any scientific selection is that the committee know what is desired in the textbook which is to be selected. Without knowing what is expected of the text to be used, the committee has no standards to apply. This should be definitely decided then, before any examination of texts is made. The selection process then consists of a mere singling out of the book which most nearly fulfills these requirements.

Recording the Ratings of Textbooks

As the comparisons are made, a definite method should be used for keeping a record of the rating of each book with reference to the elements being considered. C. R. Maxwell of the University of Wyoming, in his outline of method for selections, suggests four columns, parallel to the list of elements, headed Excellent, Good, Fair, and Poor. The rating can be made even more definite by using a numbering system. For example: The highest possible score for any book, one which would be perfect, might arbitrarily be made 1000. Maxwell suggests dividing this into four parts, giving 50 to the various elements entering in under the heading of publication, that is author, date of copyright, etc., 250 points to the elements in mechanical construction, 600 points to the various elements under content, and 100 points to the use, from the standpoint of the adaptability of the book to a variety of uses.

Within each of these four divisions then the committee would have to assign weights to the individual elements which they wished to take into account in the selection.

This preliminary phase of the task lays the groundwork for the selection and is very important. The completeness or restriction of the number of elements to be considered, particularly in the main division relating to content, will depend upon the committee. They would also decide, of course, on the total points to be assigned to the four divisions mentioned, or they might not wish to create these same divi-

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sions at all. In any good selection, however, the bulk of the weight will be given to the division of "content." Using a system of this kind, if the main divisions and the elements within these have been judiciously weighed, the text averaging the highest number of points, should be the best book available for the particular use which is to be made of it and which was definitely considered in making up the analysis outline.

I should like, in closing, to mention two recommendations for adoption, which were worked out in the Seattle schools last year and which seem to me to have been carried on in a really efficient and scientific manner. One was made by the modern-language department for the adoption of a Spanish grammar and the other by the English department for the adoption of a textbook for composition classes. In both cases the committee as a whole was asked to rate books on the content only, and in each case the work involved for each member was lightened by assigning only certain elements to one member. In the case of the composition text, the elements, with the weighted values, were as follows:

The Sentence, Grammar, and Punctuation taken together, 30 points.
The Paragraph, 20 points.
The Business Letter, 15 points.
Exposition, 10 points.
The Social Letter, 10 points.
Narration, 5 points.
Description, 5 points.
Oral Work, 5 points.

These total 100, though this need not have been the case, the weighing system being arbitrary and not necessarily on a percentage basis. The procedure was merely this: The person handling the element "narration" for example, decided which book was superior on this one point. This book was entitled to five points, that being the number of points assigned to the element "narration." As with the other method of scoring, the book having the greatest total was deemed to be the best one for the purposes desired in the Seattle schools.

The assignment of each element to one committee member accomplished more than a mere division of labor. It tended to make the selection more objective, in that it spread the judgment of each member over the full number of books and, even given a prejudice for one book on the part of one member, this would affect the selection to only a limited degree. Another distinct advantage in this method lay in the fact that each member in making an inspection for one element only, made his inspection more easily and at the same time, through a greater familiarity with this one simplified task, he did it more expertly. Then too, each member was given an element in which he had a particular interest. I am sure that all members of the committee felt confident that a fair, impartial selection had been made.

PARENTS VISIT SCHOOLS.

New York—Open school days are attracting parents to schools to see how their children learn and play. This scene in Public School No. 39, shows teachers, pupils, and parents. (International Newsreel Photo.)

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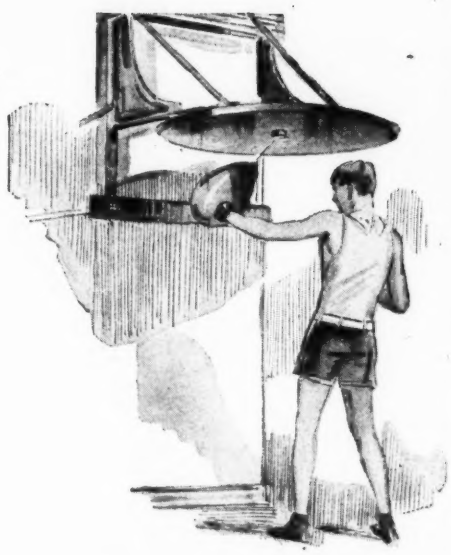

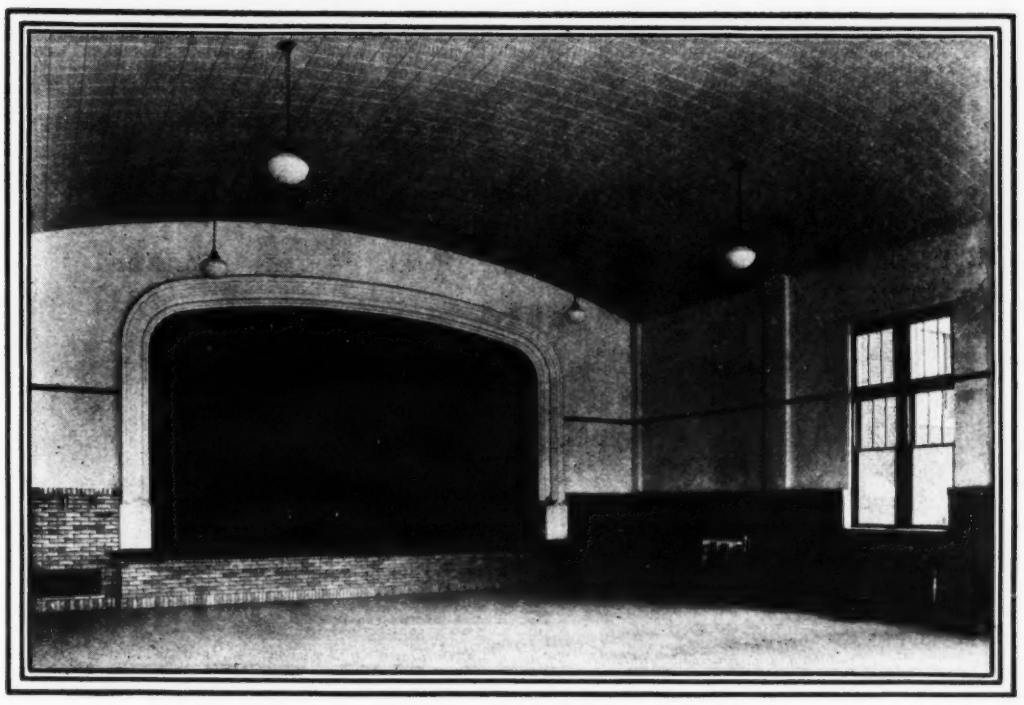

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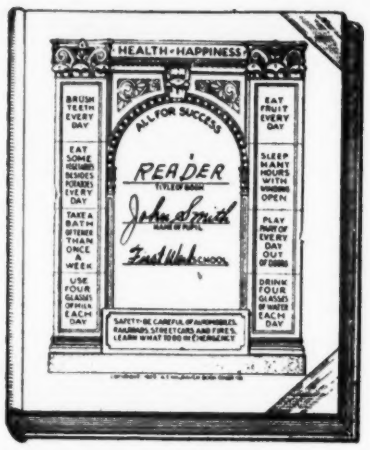
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NEWS OF THE SCHOOL BOARDS

EVANSVILLE BOARD OF EDUCATION PRAISED FOR YEAR'S WORK

Apropos of an expression of the board of education of Evansville, Ind., at its meeting on December 27, to strive to attain the best for the children of the city in every educational way, Supt. J. O. Chewning in his communication of December 29, included with his New Year's greeting to the members, a short résumé of the attainments of the board during 1927. Mr. Chewning cited what the fulfillment of the five-year building program and the other projects now being considered by the board will mean to the city.

The first of the year's accomplishments cited by Mr. Chewning was the removal of the nonteaching employees of the schools from the danger of political and personal favoritism, as in the case of the teachers. In placing the school-board employees on the same high plane of merit and efficiency, it is believed the efficiency of the business department has been improved immensely.

Another accomplishment to which Mr. Chewning called attention was the continuance of the five-year building program which will provide equal advantages for all children of the city, regardless of their color. In connection with this work, it was also planned to provide complete insurance protection for all school buildings and their fixtures.

Mr. Chewning praised the cooperative spirit of the members, pointing out that the board has always acted as a unit in all matters and has thus avoided pitfalls and troubles encountered by other school boards. Where there have been differences of opinion on any question, the members have threshed out the matter until all members could reach an amicable agreement and finally act as a harmonious board.

Mr. Chewning concluded his communication with the statement that "it is a pleasure to work under the direction of such a board. It is gratifying beyond expression to be able to look the world in the eye and say sincerely, that all is well with the school-board management. Certainly there will be mistakes, but these will be errors of judgment only, and it is apparent that the board is attempting to settle every matter solely for the good of the children. At the close of the year, these are pleasing thoughts with which to step from the old into the new year. May I propose that 1928 will be full of the richest blessings, and that together we may surpass all previous efforts for the public schools of Evansville."

THE STATUS OF COMMITTEES ON BOARDS OF EDUCATION

The tendency among city boards of education is to reduce the number of standing committees or to abolish them, according to a recent report of Mr. W. S. Deffenbaugh, chief of the city-schools division of the U. S. Bureau of Education. Mr. Deffenbaugh shows that of 41 boards of education in cities of 100,000 or more population reporting to the bureau in 1917, only 8 had no standing committees; of 55 boards of education in cities of this size reporting in 1927, 21 have no such committees. The average number of standing commitees in each of the cities reporting in 1917 was 5.6, and the average number in 1927 is 3.4.

Of 25 boards of education in cities of 100,000 or more population reporting in 1917 and 1927, Mr. Deffenbaugh found that 11 have reduced the number of committees, while 9 have abolished them or have organized the board as a committee of the whole. Five boards have increased the number of committees. The average number of committees in each of the 25 cities in 1917 was 6.4, and in 1927 the average number is 3.5.

Of 131 boards of education in cities from 30,000 to 100,000 population reporting in 1917, only 12 had no committees; of 140 boards in cities of this size reporting in 1927, 35 do not have committees. The average number of committees in each city reporting in 1917 was 5.9, and in 1927 the average number is 4.2.

Of 56 boards of education in cities of 30,000 to 100,000 population reporting in 1917 and 1927, Mr. Deffenbaugh found that 24 have reduced the number of committees, and 15 have abolished them or have organized the board as a committee of the whole. The average number of committees in these 56 cities in 1917 was 6.2, and in 1927 the average number is 4.2.

In all, about 30 different kinds of committees are reported by both classes of cities. In addition to the regular committees on finance, buildings and grounds, textbooks and supplies, and teachers, some boards of education have one or more of the following committees: Evening schools, courses of study, medical inspection, truancy, library, athletics, grievances, rules and regulations, manual training, cafeteria, discipline, retirement, legislation, special education, auditing, Americanization, elementary schools, and high schools.

How many and what standing committees a board of education should have is a question that every board of education must decide for itself. The tendency, however, is to reduce the number of committees or to abolish them. Authorities on school administration recommend that standing committees be abolished.

The following extracts from city school-survey reports prepared within the past few years indicate the general attitude of authorities on city school administration in regard to standing committees:

"The practice of school boards to appoint standing subcommittees to whom various executive and technical functions may be delegated is now happily passing away throughout the country. There are various reasons for the disappearance of such subcommittees to school boards, but two of them are so important that they must be mentioned here.

"First, many of the duties assigned to standing subcommittees are technical; as, for example, the duties of a committee on textbooks and supplies, or of a committee on school hygiene, or of a superintending committee, or of a committee on buildings and grounds. . . .

"Second, by assigning technical and executive functions to standing subcommittees, the board deprives itself of the leadership required in the discharge of those functions. . . .

"Incidentally, it should be noted that the abolition of standing subcommittees of the board causes a practical increase in the responsibilities of every member of the board. As a member of a subcommittee he usually feels chiefly responsible for the work of his subcommittee and only a limited responsibility for decisions relative to the work of other subcommittees."—Report on a Survey of Certain Aspects of the Lancaster, Pa., City School District, Graduate School of Education, Harvard University, 1924-25. Paul H. Hanus, Director.

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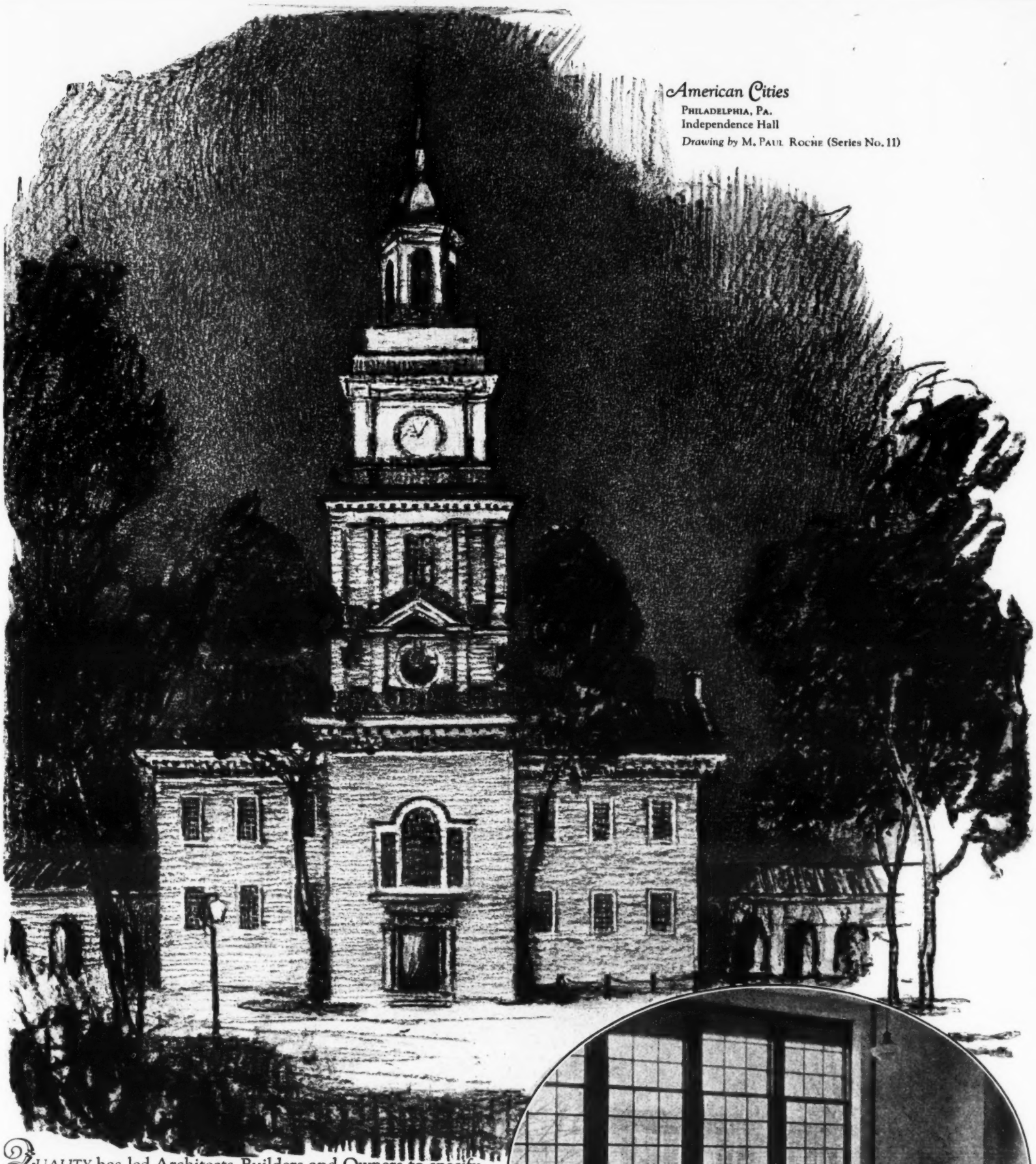

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(Continued from Page 96)

"Inevitably the tendency of permanent committees is to undertake regulation and to retain duties rather than to consider the broader questions of policy which need to be formulated definitely for the guidance of the board of education. When a board of education definitely adopts the policy of making a superintendent the executive head of the school system, including both the educational and business system, and abandons the idea of permanent committees, securing through the superintendent the definite series of recommendations and reports for each board meeting, the actual work of the board is carried on, on a far higher plane."—Survey of the Peoria (Ill.) Public Schools, by Charles E. Chadsey, Director, 1924.

"Eliminate standing committees. A city looks to the board of nine members to manage its schools. With standing committees, the board breaks itself up into several smaller boards, loses some of that unity of understanding on the part of the whole body which is so essential, scatters its energies, and wastes its time."—Volume One, The Racine School Survey, Racine, Wis. A. S. Barr, Department of Education, University of Wisconsin, Director, 1926.

"There is always some question as to the respective functions of committees of boards of education. Some of the best authorities declare that the small board of education can function and meet its responsibilities much better without any standing committees. As the work which falls on the members of the standing committee can often be equally well done by other administrative methods we are inclined to the opinion that boards of education might better so organize their work as to delegate reasonable responsibility to their appointed executive officer. This should be done, of course, under proper restrictions. If so organized, the work of the board can often be done more efficiently and responsibility can be definitely fixed."—A Report of the Survey of the Lockport (N. Y.) School System, by the State Department of Education, 1924.

"It is important that the board of education consider the program and policies proposed by the superintendent of schools as a board and not in separate committees who report to the general body. There may be times when a special committee of the board of education will prove useful in reviewing carefully with the executive officer or his associates some problem requiring careful study from the layman's point of view. In such cases special committees should be appointed and their report should be considered along with the recommendation of the superintendent. The chairman of a standing committee quite commonly comes to believe that he has some peculiar fitness or ability in the field represented by his committee and frequently he will be inclined to assume the function of the executive."—Report of the Survey of the Schools of Port Arthur, Texas, 1925-26, by the Institute of Educational Research, Division of Field Studies, Teachers College, Columbia University, George D. Strayer, Director.

"Such committees (supplies. finance, buildings and grounds) with executive functions, are unnecessary. The superintendent and his assistants should be responsible for all executive actions for the schools. In fact there seems to be little utility in any standing committees for city boards of education. The abolishment of standing committees of the board would justify the establishment of a business department under the control of the executive officer of the board."—A Survey of the Educational Program, Organization, and Administration, School Finances and Schoolhouses of Vallejo, Calif. Directed by F. W. Hart and L. H. Peterson, Department of Education, University of California 1926.

"A board which has standing committees to which it refers matters for investigation and report is to that extent misinterpreting its function. Its members are expending time and energy in doing inefficiently the work that the superintendent has in reality been hired to do. . . . The practice of the board working as a unit rather than through committees is to be commended and should be continued."—Report of the Survey of the Humble, Texas, Public Schools, 1926. Directed by T. S. Montgomery, Professor of Education, Sam Houston State Teachers College.

BOARDS OF EDUCATION

—The board of education of Willoughby, Ohio, recently lost its case in its legal battle with Weldon and Kelly Company when the Supreme Court declined to hear the case in which the sum of $3,552 was involved. The decision of the court is final and means that the $3,552, with interest, must be paid.

The case began when Weldon and Kelly, contractors, brought suit against the school district to recover the sum of money for additional work performed in connection with two school buildings. The court rendered a decision in favor of the contractors, with the exception of one item of $49.

(Continued on Page 100)

TABLE 1.

Number of City School Districts

	100,000 or more population				30,000 to 100,000 population			
Number of committees	1917	Per cent	1927	Per cent	1917	Per cent	1927	Per cent
0	3	7.3	21	38.2	12	9.1	35	25.0
2	0	0	1	1.8	4	3.1	8	5.7
3	9	22.0	4	7.3	8	6.1	17	12.2
4	5	12.2	6	10.9	24	18.3	17	12.2
5	5	12.2	10	18.2	18	13.7	14	10.0
6	5	12.2	5	9.1	20	15.3	16	11.4
7	5	12.2	2	3.6	16	12.2	9	6.4
8	4	9.7	4	7.3	13	10.0	9	6.4
9	1	2.5	1	1.8	6	4.6	9	6.4
10 or more	4	9.7	1	1.8	10	7.6	6	4.3
Total	41	100.0	55	100.0	131	100.0	140	100.0

TABLE 2.

Number of City School Districts

	100,000 or more population				30,000 to 100,000 population			
Number of committees	1917	Per cent	1927	Per cent	1917	Per cent	1927	Per cent
0	0	0	9	36.0	0	0	16	28.6
2	0	0	1	4.0	1	1.8	3	5.4
3	6	24.0	3	12.0	4	7.1	6	10.7
4	2	8.0	3	12.0	13	23.2	4	7.1
5	4	16.0	4	16.0	6	10.7	4	7.1
6	3	12.0	2	8.0	11	19.7	8	14.3
7	3	12.0	0	0	8	14.3	7	12.5
8	3	12.0	2	8.0	6	10.7	4	7.1
9	2	8.0	0	0	1	1.8	2	3.6
10 or more	2	8.0	1	4.0	6	10.7	2	3.6
Total	25	100.0	25	100.0	56	100.0	56	100.0

An important message to you about the *EFFICIENCY* of VITA GLASS

VITA Glass—the remarkable window glass that admits the healthful ultra-violet rays of sunlight—is open to the most searching investigation.

The proof of its value is so conclusive that Vita Glass is now being installed in hundreds of America's leading homes, hospitals, schools, apartment houses and office buildings.

Vita Glass is used in 15 stories of the new Equitable Trust Co. Building, New York.

All claims made for Vita Glass are based on actual results . . . on scores of experiences here and in England, where in 1924 Vita Glass was discovered and developed.

The facts prove beyond all question that Vita Glass at all times transmits a sufficient volume of the vital ultra-violet rays for all health purposes.

After weathering, transmission power stays constant

All glasses, from exposure, lose some of their ability to transmit visible and invisible light. This phenomenon is called "solarization." This process diminishes some of the transmission ability of Vita Glass during the first few weeks, but after that its transmission power stays constant and is more than ample to bring indoors a sufficient volume of ultra-violet rays for every health purpose. This has been proven conclusively by all experiences and tests with Vita Glass over a period of years.

Biological tests conducted under the auspices of the Council on Physical Therapy of the American Medical Association prove that, even in winter, Vita Glass admits a sufficient amount of ultra-violet rays to prevent the development of rickets—that dreaded and common disease of childhood. Furthermore, the general health effects were such as to show a material gain in weight under Vita Glass as compared to ordinary glass.

Statements based on visible . . . provable results

The facts about Vita Glass are not based on theory but on actual results . . . visible . . . provable results upon the health of actual people living under Vita Glass:

School children, in Smethwick, England, who in a ten months' test increased their height and weight notably and decreased absences due to illness 40 per cent.

Fathers, mothers and children in their homes, who are enjoying the tonic, invigorating effect of Vita Glass, just as much today as they did two years ago when it was first installed.

Patients in hospitals, whose convalescence has been speeded up and where after several years of use, hundreds of other grateful patients are still enjoying its beneficial effects.

The facts are yours for the asking. We want you to have the complete story, including a record of many convincing biological tests. We also want to tell you about some of the

Vita Glass Solarium at Brown's Physical Training Farm, Garrison, N. Y. Mr. Brown says, "The daily sunbath under Vita Glass is a necessary part of our health-restoring routine."

important installations we are making.

Fill in the coupon below and we will send you full information. Do this today. Vita Glass can be purchased through all glass dealers or direct from the Vitaglass Corporation, 50 East 42d Street, New York.

Vitaglass Corporation, 50 E. 42d St., New York E-2

Gentlemen: Please send me the story of Vita Glass. I am particularly interested in Vita Glass for ☐ Home ☐ Office ☐ School ☐ Hotel ☐ Apartment House ☐ Factory.

Name_____

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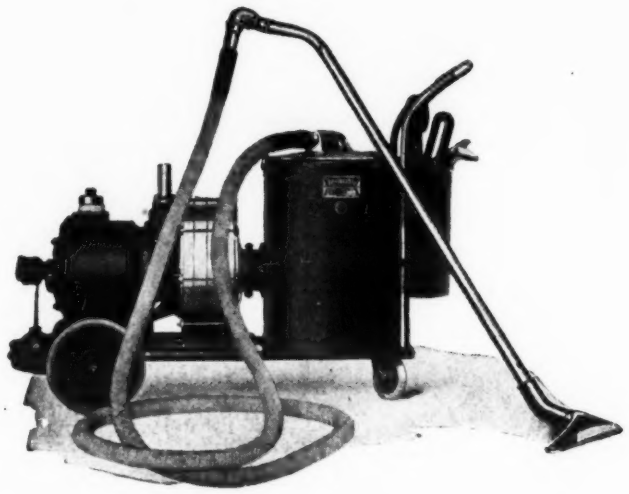
"CLEANLINESS KNOWS NO SEASON"

Save 40% and have cleaner, more healthful schools

"INVINCIBLE" Portable Vacuum Cleaners meet every school requirement. They have tremendous cleaning power, are easily handled, and are sturdily constructed to give a life time of satisfactory service.

"INVINCIBLE" Portable Vacuum Cleaners require no intricate piping and no long, heavy lengths of hose. Their maintenance and operating cost is extremely low.



"INVINCIBLE" Portable Vacuum Cleaners clean floors of any kind, blackboards, chalk troughs, erasers, walls, ceilings, window ledges and in fact every nook and corner of the entire building.

Write us today for complete information and report on cleaning schools.

INVINCIBLE VACUUM CLEANER MFG. CO.
DOVER, OHIO, U. S. A.

(Continued from Page 98)

—A writ of quo warranto, requiring Senator Gustaf Widell to show cause why his position as a member of the Mankato, Minn., school board should not be declared vacant, has been obtained by Dr. W. A. Beach, a member of the board. Dr. Beach contends that the constitution forbids a member of the state legislature to serve as a school-board member.

—Belding, Mich. The board of education has asked the city council and the police department to assist in discovering the parties guilty of selling cigarets to minors. The council has agreed to use its influence to stop the sale among school children.

—The board of education of Berea, Ohio, has legally passed out of existence due to the fact that members elected last fall may not take office, because there will be no elective positions during the next two years. It appears that in the formation of a new school district in the village of Middleburgh, the Berea board was automatically dissolved since it became a part of the school district. The county board of Cuyahoga county will appoint a board which will serve the Berea schools until a new board is elected in two years.

—A political controversy over the control of the St. Bernard, Ohio, school board is alleged to be the basis of the suit filed in the Court of Appeals recently by Charles V. Eynden. Mr. Eynden, who was elected to the board last November, has asked the right to retain the office and to oust Irvin Paulson from it. Mr. Eynden has moved to Mt. Airy, but retains his residence in St. Bernard where he has property and where his family resides. On the ground that he is no longer a resident of the town, the board declared his place vacant and named Paulson to the same.

—Indianapolis, Ind. The board of education has adopted a resolution of Mrs. Lillian W. Sedgwick, a member of the board, which abolishes the positions of the three assistant superintendents. The action which becomes effective at the close of the school year in June, removes from office Mr. Joseph F. Thornton, Mr. D. T. Weir, and Miss Flora Drake. The action has been taken as a direct attack on the educational department, since criticism had been voiced frequently by members of the majority faction and there had been some indication that changes would be made.

—San Francisco, Calif. The board of education has appointed Mr. H. M. Monroe as secretary and assistant to Mr. David P. Hardy, deputy superintendent in charge of the business affairs of the schools. Mr. Monroe was formerly vice-principal of the High School of Commerce, and was for three years advertising manager of the Fuller Paint Company, and purchasing agent for the California Paint Company.

—Sioux City, Iowa. The school board has begun a study of the business methods used by the leading school boards of the country. It is the purpose of the board to reorganize the methods used in handling the business of the schools.

—Indianapolis, Ind. The local chamber of commerce, through its education committee, has begun a study of the methods of selecting school-board members. A special committee has been appointed to make a study of the systems in use in other cities of the country.

—The board of education of Dist. 7, of Berkley, Mich., has brought suit against four members of the school board of Royal Oak, for the collection of $3,000. The money, it is alleged, was misappropriated when the board voted to build a road to the Burton school, then under construction. The suit was brought on the ground that the road should have been constructed by the township or county, and that the board had no authority to construct it.

—A new law passed by the legislature of Wisconsin requires that school-board members be elected by popular vote at the regular spring election. Elkhorn, a town in Wisconsin, will see the law in practical operation next spring. The members of the board who will initiate the new law are Dallas E. Davis and Charles Lyon.

—The school board of Orleans Parish, La., has asked to rescind or modify a rule prohibiting employees from participating in politics. President Fred Zengel, Jr., held that if the rule is not being obeyed by employees of the board, it might as well be rescinded.

—The right of the board of education and school authorities of Tulsa, Okla., to require vaccination in the schools has been brought before the local district court as a test case. The right of the school board to make a ruling calling for vaccination has been challenged by a parent who objected to vaccination against smallpox. The rule was passed to prevent the spread of smallpox in the schools.

—Attorney General C. C. McCall of Alabama has given an opinion holding as valid, an act of the legislature providing for the consolidation of the public-school systems in counties with not less than 75,000 nor more than 100,000 population and for the establishment of a consolidated board of education. The attorney-general held that the consolidation of the two boards in Montgomery county is intended to bring about a complete and revolutionary change in the school system of Montgomery and that it is not violative of the constitution.

—The school board of Tiffin, Ohio, has entered into an agreement with the trustees of Heidelberg University, which provides that student teachers of the university shall be given six weeks of practice teaching in the local schools.

Under the plan, students will teach one class a day for nine school weeks, or a total of 45 recitations. The regular teachers in the schools will be paid $15 per semester for their work in connection with the training of the university students.

—The school board of Elgin, Ill., has been asked to approve an eight-period school day to overcome

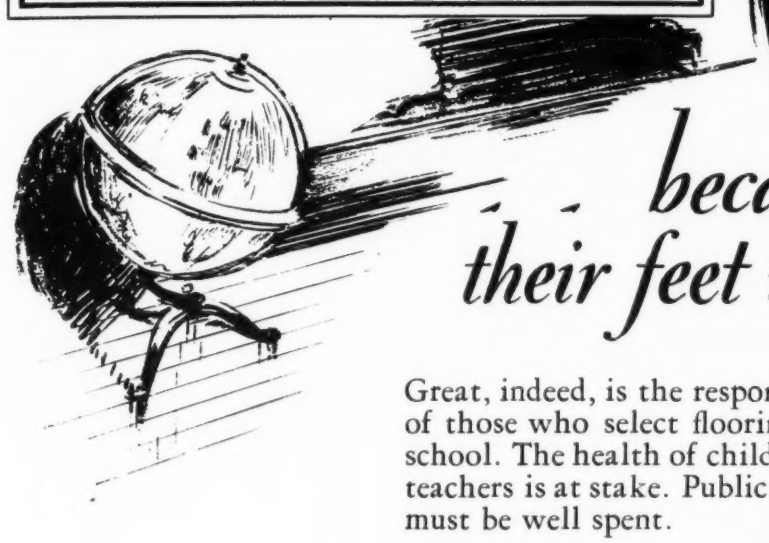
(Continued on Page 103)

MEANING OF STATISTICS

When a person says that statistics have no meaning for him he is confessing that he has no imagination, or else that he does not use the imagination he has. A man should never depend upon his imagination for his facts; but into cold hard facts, his imagination can breathe the very breath of life. Statistics will be meaningful or not, largely in proportion to the quality of his imagination, and the use he makes of it. When Columbus was facing the shoreless sea, and his men grew mutinous and the very winds forgot their way, and the stars were gone, and the mate asked him what they should do, Columbus remembered the branch with the pebble caught in its crevice which he had seen the trade winds carry to the shores of Spain, and from that pebble his imagination created a continent, and from that branch a forest.—Daniel L. Marsh, President, Boston University.

Their health records are good - - -

year in & year out



- - because the floor beneath their feet is warm, dry, resilient, clean

Great, indeed, is the responsibility of those who select flooring for a school. The health of children and teachers is at stake. Public moneys must be well spent.

What flooring material meets these vital requisites? Hundreds of schoolboards have found the answer in Northern Hard Maple.

Northern Hard Maple is warm and dry. It provides a cushioning effect beneath the feet. Reduces fatigue. Cuts down absences due to sickness.

This unique flooring material, moreover, is remarkably tough-fibred and tight-grained. Will not sliver, splinter, or develop ridges when subjected to the pounding and friction of youthful feet. Maple actually outwears stone!

And because of its permanent smoothness, Northern Hard Maple is the easiest of all flooring materials to keep clean—offers no open lodging places for germ-laden dust and dirt.

Here, then, is the one flooring material that combines health with ultimate economy—providing, at the same time, easy installation and firm anchorage for desks. Consult your architect about the use of Northern Hard Maple Flooring.

Maple Floors in Color

By a scientific process recently developed, hard Maple Flooring is now made to take a variety of beautiful, lasting color finishes—opening up entirely new possibilities for attractive decorative effects. Standard finishes as follows:

EARLY AMERICAN, SPANISH BROWN, AUTUMN BROWN, SILVER GRAY, DOVE GRAY, ROYAL BLUE, PASTEL GREEN, ORCHID, SEAL BLACK, NATURAL

Write for *free* booklet, "The New Color Enchantment in Hard Maple Floors."

Let our Service and Research Department assist you with your flooring problems. Write us.

Floor *with* Maple

Guaranteed Floorings

The letters **MFMA** on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for it on the flooring you use. **MFMA**

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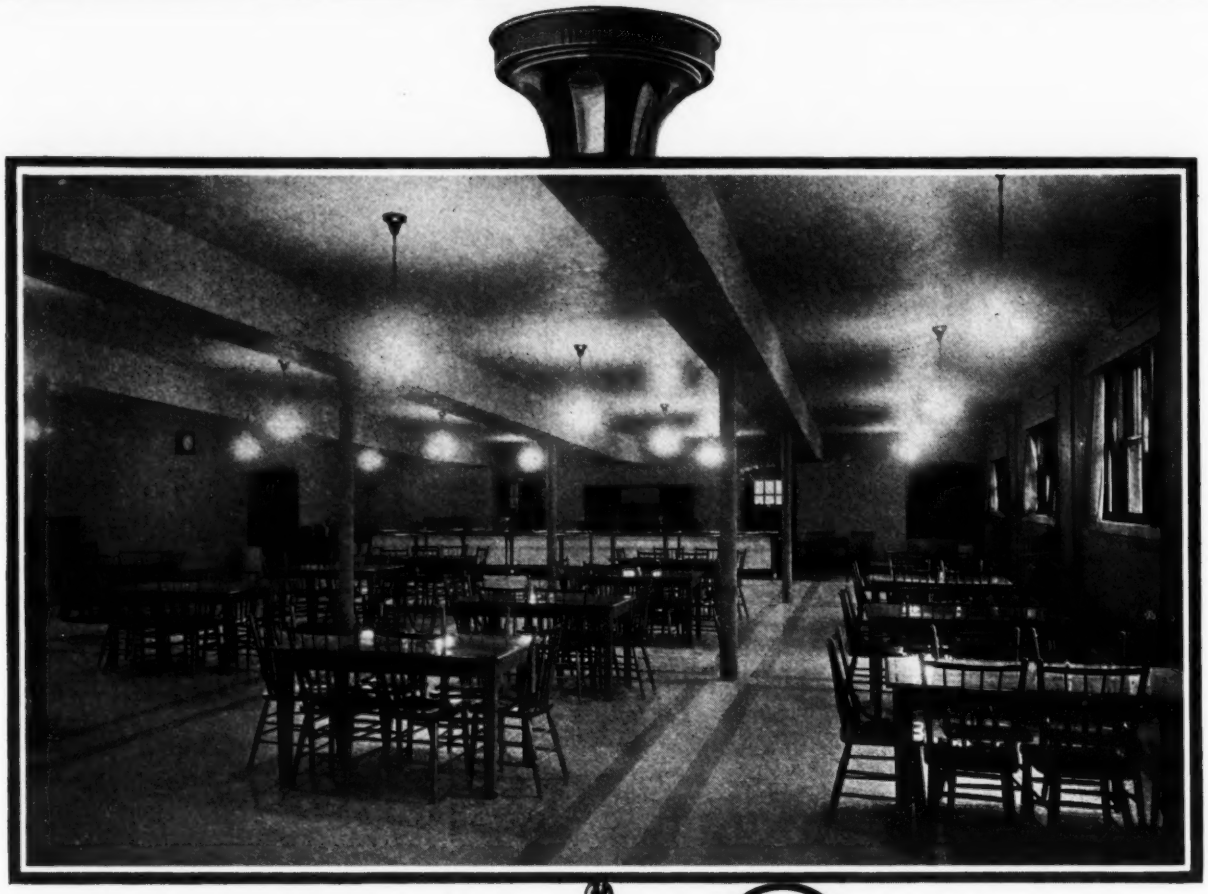
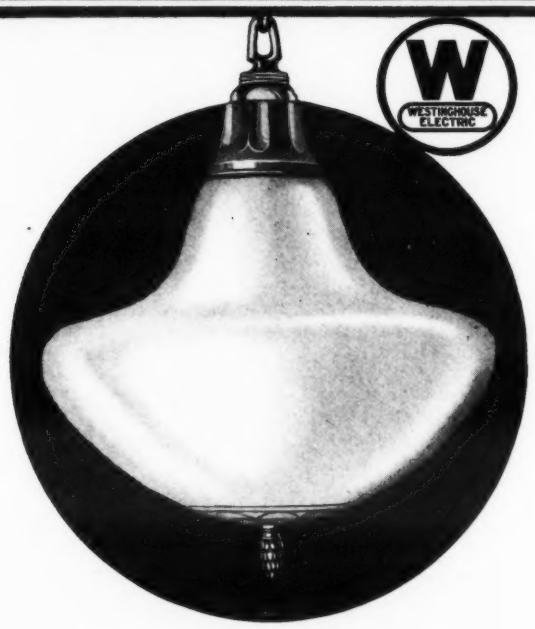
Chicago



Better Vision



Better Lessons

GOOD light on dark days means better vision, and better vision means better lessons. That is why leading school authorities throughout the country are turning their attention toward the lighting problem—and Sol-Lux Luminaires.

In school cafeterias, class rooms, corridors, and study halls—any place where children's eyes are put to test day after day—good light is needed. Young eyes must be given ample light to avoid strain, diffused light to protect them against glare.

In designing Sol-Lux Luminaires, engineers had in mind two things; ample light—light that reaches every corner of the room, and yet glareless light—light that does not strain the eyes. The special diffusing glass in Sol-Lux Luminaires takes the glare from the lamp and absorbs only a limited amount of light.

Lighting specialists at our nearest district office are at your service at any time. Write or phone today.

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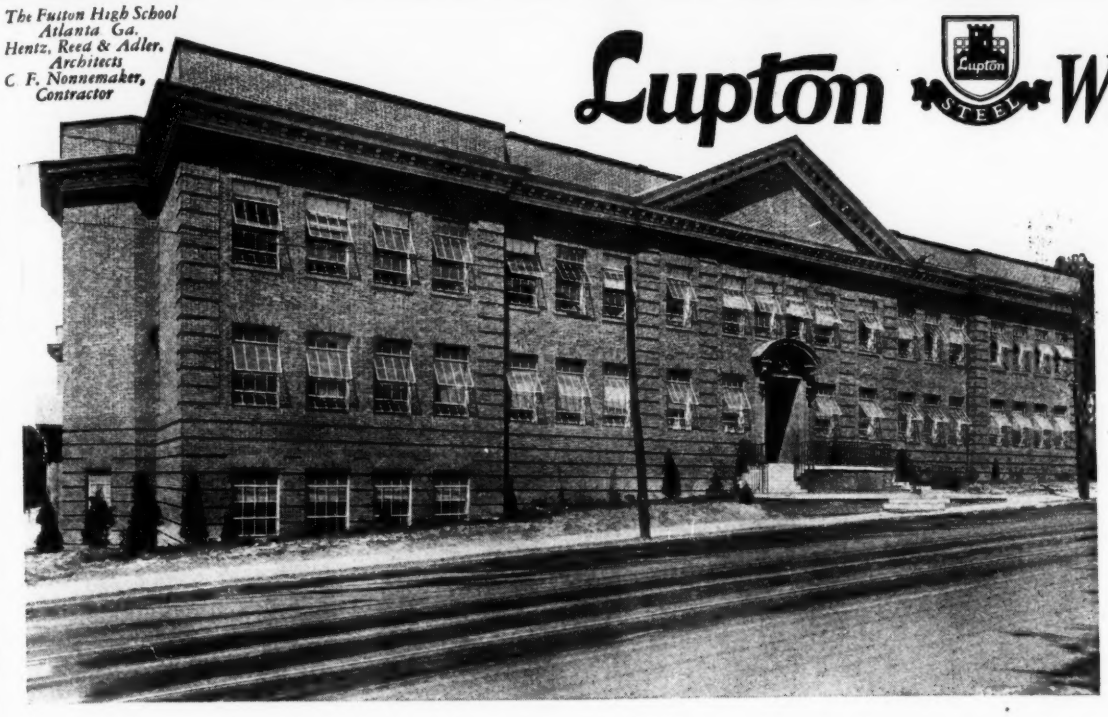
Merchandising Department
South Bend Works South Bend, Indiana

Westinghouse

X93671



The Fulton High School Atlanta Ga. Hentz, Reed & Adler, Architects C. F. Nonnemaker, Contractor

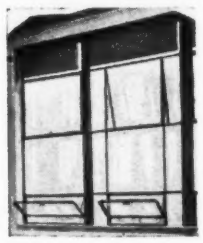
Lupton STEEL Windows for Schools

OVER A PERIOD of fifteen years, Lupton has made and installed high-grade steel windows in many schools.

These windows have uniformly excelled in giving natural light and ventilation, in easy operation and in maintenance economy. Further than this, they have preserved in the refinement of their design the architectural dignity so essential to modern school design.

Lupton is well fitted, therefore, not only to make good windows, but to counsel with you on their economical and effective application. Lupton engineers will gladly make recommendations, entirely free of charge. Call on them.

Lupton Projected Windows were installed in the Fulton High School. This type is efficient and moderate in cost.



DAVID LUPTON'S SONS COMPANY, 2205- East Allegheny Avenue, Philadelphia

(Continued from Page 100)

the present congestion in the high school. The plan involves a reduction of the noon recess period to one hour.

—On the eve of a city election, the school board of Detroit, Mich., was asked to remove all "blind pigs" located near school buildings. One member asked why the blind pigs were not removed near the homes of the pupils, and another asked why they were not eliminated from their own homes.

—Terre Haute, Ind. The school board has been asked to approve a change in the pay schedule of janitors. Supt. George Carrol argued that the salaries of janitors should be determined by merit.

—Evansville, Ind. The school board has refused to permit the local W. C. T. U. to place its blotters in the schools. The action was taken to prevent propaganda by any group or faction.

—St. Louis, Mo. The school board at a recent meeting was asked to approve a resolution raising the number of assistant superintendents from three to six. Another resolution called for the creation of a bureau of research and publicity. The resolutions were assumed to mean a double slap at Supt. J. J. Maddox, which sought to repudiate his efficiency policy and to curtail his powers of authority. It appears that Supt. Maddox presented a far-reaching program of reform some months ago, which included reducing the number of assistant superintendents and other radical changes in the organization of his department. Both measures will be discussed more in detail at the next meeting of the board.

—Under a new school code passed by the last Michigan legislature, school boards have the power to designate such sites as it may deem necessary. The board may order the suspension or expulsion from school of any pupil guilty of gross misdemeanor or disobedience.

—A ten-year term for members of the state board of education of California has been urged by State Supt. W. J. Cooper. Under the proposed system, four members of the board would be appointed during the governor's four-year term. A board of ten members would be provided.

—Mr. C. S. Wheaton, who has been a member of the Portage township school board at Gypsum, Ohio, for the last eighteen years, has resigned.

—Supt. W. H. Kirk, of East Cleveland, Ohio, has passed a rule prohibiting membership in high-school secret societies. Parents of the students are supporting the students in the fight on fraternities, which have a membership of 1,000 students.

—Henderson, Ky. Mr. Arthur Katterjohn has been reelected as secretary of the board of education.

—Mr. W. J. Raymer, a member of the board of education of Chicago, Ill., has announced that he will resign with the close of the McAndrew trial. Mr. Raymer's term of service ends in 1928.

—Newport, Oreg. A second strike supported by the parents of some forty high-school students has begun at the high school as the result of a controversy over the principal. The pupils obeyed the instructions of the parents who ordered them to collect their books and go home.

—Battle Creek, Mich. The school board was recently severely criticized by Mayor Bailey for "wild and fantastic extravagance." The occasion for the statement was the action of the board in filing a petition for compelling the county board of supervisors to spread the sum of $907,112 on the tax rolls in place of the $700,000 appropriated by the board for the support of the schools the coming year. In his statement, the mayor questioned the right of the board to build and equip the schools and to levy and collect taxes for the same without submitting the question of whether the assessment should be made to the patrons of the school district. The mayor charged that the school board had been liberal with the people's money in buying swimming pools and all the fads and fancies.

—The industrial commission of Wisconsin has ruled that the enforcement of the street-trade laws, under the present laws, lies with the boards of education in cities, villages, and school districts of the state. Originally, the law was enacted to apply to Milwaukee, but it now applies to the entire state. Under the law, it is the duty of the supervisor of state trades to see that all boys engaged in street trades are equipped with permits and badges as the law provides.

—Superintendent W. T. Logan who was ousted by the school board of Cromwell, Oklahoma, has been temporarily reinstated by the courts.

—The charges filed against Superintendent Fred W. Burrill of Augusta, Maine, have not been sustained. The charge was made by a citizen who claimed that his boy had been too harshly dealt with. The school board unanimously exonerated Mr. Burrill.

—The right of Gustaf Widell, or a state senator, to sit as a member of the school board of Mankato, Minnesota, was questioned by Dr. W. A. Beach, a fellow board member. The objection was overruled by the president. Court proceedings are threatened.

—The Wisconsin Department of Public Instruction has ruled that a boy 14 years old having no family home, but living with a family, is fully entitled to share in all school privileges offered at the school in the district, the same as he would if he had a real home in the district.

In the same way, a child of a parent making his home at a state institution as an officer of the institution, may attend school in the district free of tuition. If there is a union free high school in the district, high-school privileges are also free of tuition.

Similarly, an Indian child residing in a school district is privileged to attend the public schools and to be cared for and instructed the same as if he were white. Under the law, Indians are citizens of the United States and the state and they must be accorded free school privileges.

—Asst. Supt. C. A. Rinehart of Lansing, Mich., in a recent statement, held that a bond protecting a school district from loss of funds does not protect the treasurer from personal liability for the money he handles. Mr. Rinehart held that a treasurer who deposits school funds under his own name without specifying that he is handling public money is technically guilty of appropriating the funds to his own use.

—The Wisconsin legislature at its last session, amended the law relating to tuition fees that may be charged to nonresident ninth- and tenth-grade pupils in the state graded schools. The tuition fee is determined by dividing the total salaries paid the teachers and principals, and the cost of textbooks, supplies, etc., by the total enrollment for the year, not exceeding the sum of $3 per week nor less than $2 per pupil per week. The statement or bill must be filed by the secretary of the high-school board, or the secretary of the state grade school offering tenth-grade work.

All-Steel-Equip Company

STEEL LOCKERS

When you buy lockers for your schools, you know that they will be abused—perhaps more than any other part of the school equipment. The normal peppy boy can't stop to think of bent doors—broken hinges—caved-in shelves—or scratched paint on lockers, when school is over and the excited rush for out-doors starts.

Knowing this, the school board with an eye to permanence in equipment secures lockers with features of construction which fortify them against these abuses. A-S-E lockers have been designed to stand up under this rough treatment—the steel angle frame—the sixteen gauge reinforced door—totally concealed unbreakable hinges—malleable iron handles and heavy baked-on enamel assure permanence and absolute lack of mechanical trouble.

Let us send you our complete locker catalog C-25.

ALL-STEEL-EQUIP COMPANY
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PHILADELPHIA—134 N. 4th St.
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CLEVELAND—328 W. Superior St.
KANSAS CITY—403 Hall Bldg.
LOS ANGELES—800 N. Spring St.
MILWAUKEE—141 E. Wisconsin Ave.
DETROIT—231 Iron St.
TOLEDO—1825 Vermont Ave.

—Attendance statistics compiled by the administrative department of the Milwaukee, Wis., public schools for the beginning of the present school year show a stationary condition or a slight loss in the elementary schools, which is attributed to the gains in the junior high and prevocational schools. The latest reports available show an elementary-school enrollment of 55,002 for this year, as compared with 55,214 last year, a loss of 212 for the elementary schools. There was an increase in the enrollment in the junior high schools of 612, and of 148 in the prevocational schools.

On account of the increased attendance in outlying districts, and the decrease in older sections of the city, the school-building problem has become a serious one. During the past year a number of new schools were opened and the board has made fairly satisfactory progress in the matter of housing facilities.

—A complete victory for the school board of Peoria, Ill., in its fight against high-school fraternities is reported. The students in the main have agreed to abide by the rules of the board on the subject.

—Three hundred and twenty pupils, five teachers, and $16,266 represent the net gain in enrollment, number of teachers, and school costs in Alaska in 1926-27. Figures recently compiled show an enrollment of 4,673 pupils, of which number 669 were in the high school. Expenses for the schools totaled $509,915. The expenses of instruction amounted to $250,654; the expenses of operation of plant, $49,223; the expenses of maintenance of plant, $10,273; and the expenses of capital outlay, $7,156. The number of schools in the Alaska system amounted to 81, which is an increase of 27 per cent. The per-capita costs based on average daily attendance was $135, which is an increase of 27 per cent.

—The National Education Association, in a study of school attendance, shows that pupils attend school longer than in the past. A decade ago we were "a nation of sixth graders." Today, children attend school an average of 6.92 years, making us a nation of seventh graders.

Much of the increase in years attended is due to the growth of the high school. If the population of the nation had increased as rapidly between 1880 and 1925 as high-school enrollment has, there would have been a population of 1,660,507,508 in that year. More pupils were enrolled in the high schools in each of the following states in 1925 than in the whole country in 1880: California, Illinois, Indiana, Iowa, Massachusetts, Michigan, New York, Ohio, Pennsylvania, Texas, and Wisconsin. Although the population increased 79 per cent between 1880 and 1925, high-school attendance increased 2,465 per cent—from 110,277 pupils to 3,650,903.

Some states have definitely reached high school in their average attendance. The schools of the state of Massachusetts lead with 9.08 years. Utah is second in attendance of 8.97 years. New Jersey is next with 8.81, Maine comes next with 8.78, Iowa with 8.68, and New York sixth, with 8.59. These states and a few others have graduated from grammar school and have reached the high school in attendance. Among the other states in order are Oregon, New Hampshire, Illinois, Wisconsin, District of Columbia, Idaho, Rhode Island, Pennsylvania, Ohio, Washington, Vermont, and Michigan.

—"Exploiting the schools is becoming a favorite occupation with a certain type of patrioteer and profiteer," says the *Wisconsin Journal of Education*. "Week after week for soap, candy, paint, mushrooms, or what-have-you leaves precious little time for the real business of the school, which certainly needs attention, in spite of scientific and foolproof methodology. Just now history seems to be the favorite subject of attack for the defenders of a super-Americanism."

—The board of education of Wayne county, Indiana, has adopted standard tests for the county schools to be used in place of the semiannual examinations. The tests have become popular because they remove the irregularity of subjective judgment of teachers and result in better grading of the pupils.

—A series of mural paintings, the work of Mrs. Frances Wiley Faig, was formally presented to the Hartwell School, Cincinnati, Ohio, on December 2. The series is designated "Old Canal Days" and the paintings hang in the corridors of the school building.

A TOW LINE FOR STREET CROSSINGS

One of the street crossings near Public School No. 4 in the Bronx, New York, as one of the teachers leads the children across the street. A tow rope arrangement keeps the youngsters in line and lessens the possibility of injury. (International Newsreel Photo.)

New trouble-proof Radiator in this PeerVent Unit

PeerVent Unit with front removed. All parts can easily be removed and replaced, without tools. The air filter (extra equipment) can be of any make specified.

The new PeerVent Radiator consists of two rows of closely-spaced fins (the front row shows in the above picture) embedded tightly into large copper alloy tubes. As the stresses of expansion and contraction cannot weaken the contact between tube and fin, there is no loss of efficiency in the transfer of heat after long service.

The radiator assembly does not contain a single soldered, welded, brazed or gasketed joint.

All of which means that this new radiator is efficient, dependable, and durable. It is worth your investigation because the radiator construction is a vital factor in any heating and ventilating system.

SEND FOR NEW BOOKLET. Enclose the name and address of your architect and we will gladly mail him a copy, too. Or, on request, we will send our local representative.

OTHER FEATURES

Noiseless a.c. motor. Adequate speed regulation, with saving of current at lower speeds.

Motor-generator set eliminated.

Improved fan housings and dampers. Better controls, larger discharge capacity at lower speeds, less noise, substantial saving of power.

Standard units and controls for practically all requirements, eliminating expensive special designs.

PEERLESS UNIT VENTILATION CO., INC.
718-34 Crescent Ave. - - Bridgeport, Conn.

New York, 369 Lexington Ave.; *Boston*, 100 Boylston St.; *Buffalo*, 135 University Ave.; *Harrisburg*, 705 Telegraph Bldg.; *Cleveland*, 1836 Euclid Ave.; *Detroit*, 1214 Lafayette Bldg.; *Chicago*, 808 Monadnock Bldg.; *Minneapolis*, 240 Seventh Ave. So.; *Portland, Ore.*, 927 Board of Trade Bldg.; *Toronto, Canada*, Darling Bros., Ltd., 77 York St.

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☐ Send booklet about PeerVent Units.

☐ Send your local representative.

SOLAR *Self-Closing* RECEPTACLES

Wherever waste accumulates

PUSH
Solar self-closing receptacles have been in use in the Montebello High School during the past three years and have given eminent satisfaction. We find them a substantial aid in keeping our buildings clean and attractive.
Mark B. Jacobs, Dist. Supt., Montebello, California.

SOLAR self-closing RECEPTACLES will co-operate in your school just as they are co-operating in hundreds of our best schools throughout the country. They compel use and aid immeasurably in teaching cleanliness and sanitation.

The patented swinging top is not only silent in operation but provides a container as easy to drop things into as an open box, yet one which is closed at all times.

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PERSONAL NEWS OF SUPERINTENDENTS

—Mr. James A. Brophy has been reelected as secretary of the school board at Newark, N. J.

—Mr. A. F. Walsman has been appointed temporarily to succeed Mr. U. M. Frazier as business director of the school board of Indianapolis, Ind.

—Dr. Ernest C. Hartwell, superintendent of the Buffalo schools, has been elected president of the New York State Teachers' Association. George R. Raynor, principal of the Chautauqua high school, has been elected vice-president.

—Mr. W. L. Trimble, formerly superintendent of schools at Raton, N. Mex., on January 1, resigned to take up new work in California. Mr. Donald W. MacKay has been elected to succeed Mr. Trimble as superintendent.

—Troy J. Wilson has been chosen superintendent at Marmarth, N. Dak.

—Mr. E. L. Bowsher of Wauseon, Ohio, has been elected superintendent of schools at Ashland. Mr. Harry E. Schwall is the newly elected head of the Wauseon schools.

—Mr. R. M. Sealey, formerly state high-school inspector of Florida, has been elected secretary of the Florida Education Association, with headquarters at Tallahassee.

—Mr. Alfred E. Standish, formerly principal of the high school at Old Lynne, Conn., has been elected supervisor of schools of the town of East Windsor. Mr. Standish received his professional education at the Bridgewater, Mass., Normal School and at Yale University.

—Mr. M. C. Taylor, a former school administrator in Louisiana and Albuquerque, N. Mex., has been elected superintendent of schools at Madera, Calif.

—Mr. William Blunt has been appointed chief clerk in the office of Supt. W. J. O'Shea of New York City. Mr. Blunt, who is well liked in the department, succeeds the late William West.

Mr. Blunt began his work in the education department of the New York City schools in 1902 during the incumbency of William H. Maxwell. For nineteen years he was a clerk to the board of examiners, being in charge for six years of the applications and examination questions. In 1922 he was appointed to the bureau of reference, research, and statistics, where he worked on the compilation of the budget.

—Mr. William Fletcher Russell, the new dean of Teachers College, Columbia University, will be inaugurated in New York City on April 10, 1928. The event will be a threefold character comprising the installation ceremony for the new dean, a national conference on education, and the annual homecoming of the alumni of the college.

—Supt. T. B. Conner, of Swainsboro, Ga., has been elected superintendent of schools at Pelham, to succeed Mr. T. H. Wilkinson. Mr. Wilkinson who had completed twenty years of service at Pelham, resigned to take a position at Miami, Fla.

—Mr. Carl A. Jessen, formerly state high-school inspector for Montana, has been appointed a specialist in secondary education in the U. S. Bureau of Education. Mr. Jessen will have charge of the compilation and distribution of information relating to the administration and conduct of secondary schools.

—Mr. L. A. Rice, of Cranford, N. J., has been appointed as an assistant in the division of secondary education of the New Jersey state education department.

—Mr. Asa Wynkoop, director of the library extension division of the New York state education department since 1905, retired from the service on December 15.

Dr. Wynkoop was graduated from Rutgers University, Columbia University, and the New York State Library School, and held degrees given by the Library School and by Rutgers University. Dr. Wynkoop had devoted 22 years of service to public library work in the state. As an inspector of public libraries he came to know intimately every library and librarian in the state. He served as president of the New York Library Association during 1927.

—Honor was recently paid to two former superintendents of schools at Jamestown N. Y., in naming two schools. The present Jefferson School will be known as the Rovillus Rogers School, and the Eighth Street School will be called the Samuel G. Love School. Mr. Love retired in 1890 after 25 years of service, and Mr. Rogers in 1919 after 29 years of service.

—Supt. M. C. Potter of Milwaukee, Wis., has been reelected for another term, at a salary of $12,000 per annum.

—Mr. Matt Rose, formerly superintendent of schools at Yazoo City and Aberdeen, Miss., died on December 10, after a short illness. At the time of his death Mr. Rose was connected with the educational department of Rand, McNally & Company.

—Mr. Walter Brookhart of Lima, Ohio, has been appointed as superintendent of schools at Cridersville. Mr. Brookhart succeeds L. F. Schumaker, who resigned to take another position.

—Mr. W. L. Coffey, formerly superintendent of public instruction of Michigan, has been appointed dean of the College of the City of Detroit by the board of education of that city.

—Mr. S. D. Copeland, formerly principal of the Houghton School at Augusta, Ga., has been elected assistant superintendent in charge of elementary instruction.

—Dr. Wilson Gee, of the University of Virginia, has issued a report covering the statistical survey of the state of Virginia. The institute was established last year as the result of a gift of $137,000 to the University for research in the field of social science. The grant covers a five-year period and provides that $27,000 shall become available each year.

—Mr. D. R. Sheldon, formerly vice-principal at Gilbert, Ariz., high school, has become superintendent of schools at Holbrook.

—Mr. Milton J. Glenn, for the past two years secretary of the school board of Dubuque, Iowa, has announced his resignation, to take effect January 1. Mr. Glenn will devote his entire time to the practice of law.

—Supt. G. P. Young of Alamosa, Colo., has been given a three-year contract, which became effective in September, 1927.

—When Supt. E. D. Merriman of Anacortes, Washington, was elected to a similar position at Buckley, Washington, the school board of the former city congratulated the latter. The communication which is signed by W. D. Jackson, Howard J. Sackett, and G. W. Krebs, says: "Superintendent Merriman is now in the prime of life, in good health, alert, progressive with an established reputation as a fine school executive and as a good citizen. He is active in community affairs, a member of the best fraternal and educational organizations, above all a thoroughly reliable and capable man."

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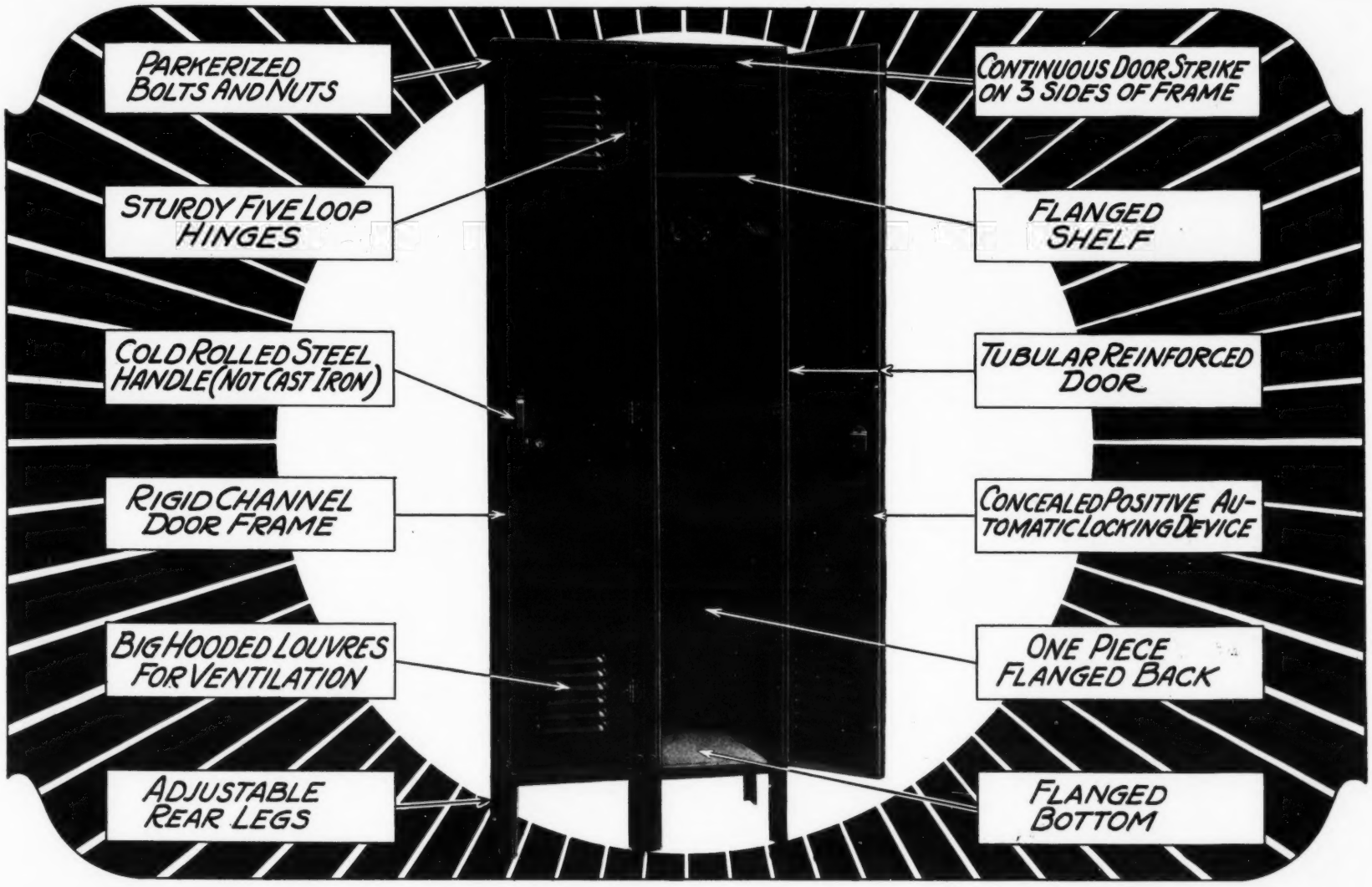
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Toledo, Ohio

Braintree High School
Braintree, Mass.

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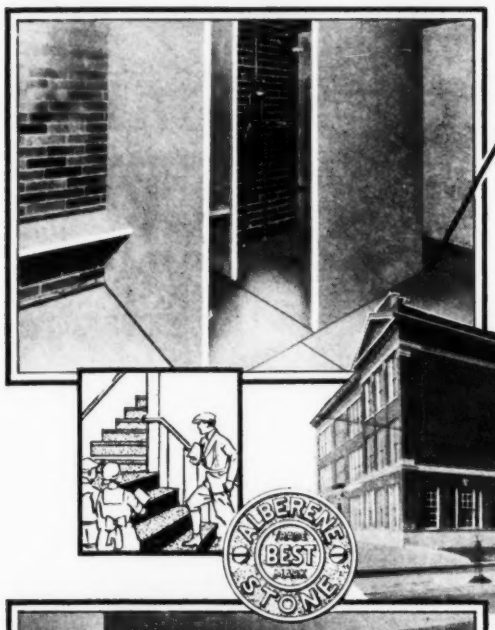

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Public School No. 11.
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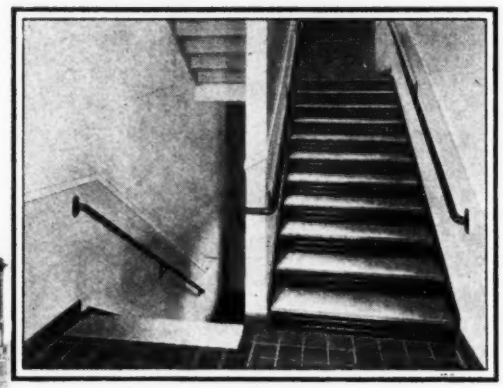
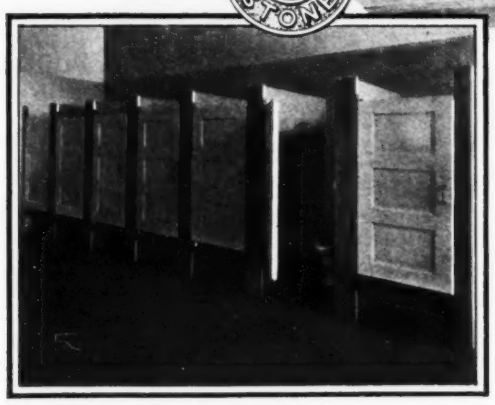
Architects.





For stair treads and landings, for shower stalls and dressing rooms, for toilet partitions and urinals, and for laboratory equipment — Alberene Stone possesses those time-proof qualities which have dictated its use in many of the most modern and up-to-date school plants. * * * Write the Alberene Stone Co., 153 West 23rd Street, New York, for the catalogs explaining Alberene applications, advantages, and conveniences.

SCHOOL HYGIENE

MEDICAL INSPECTION IN THE PHILADELPHIA SCHOOLS

The annual report of Dr. Walter S. Cornell, director of the division of medical inspection of the Philadelphia schools, has been presented to the board of public education.

A total of 100,773 major and 17,744 minor defects were discovered by physicians last year and reported to parents of the children. A large majority of these cases were corrected. The defect which tops all others in point of numbers is caries or decayed teeth. More than 58,000 children received dental attention as a result of warnings given by the physicians at the time of examination.

Tonsils of 3,548 children were removed in accordance with the advice of school authorities, and 8,583 pupils sought the advice of oculists and were fitted with glasses. More than 2,000 had adenoids removed and 750 underwent treatment for speech defects.

One of the most significant corrections made was that of malnutrition, a condition which is attacked in several ways by school doctors. Serious cases of malnutrition are placed in special classes, where they are weighed each day, and receive special food and rest periods. More than 13,000 malnutrition cases were corrected last year.

Medical inspection of public-school pupils, was started in 1912 and the present report on nurse service is the first to be presented, as this service was started a year ago. At present there is one nurse to each 3,000 pupils.

The division of medical inspection is under the supervision of Director Krusen and Dr. Oliver P. Cornman, associate superintendent of schools.

RULES FOR THE PREVENTION OF POLIOMYELITIS

The state board of health of Florida has adopted a rule looking toward the prevention of the spread of poliomyelitis. The rule which was adopted on November 11, 1927, reads as follows:

"Owing to the greatly increased number of cases of infantile paralysis in a number of states and wishing to protect the children not only of our own state but also those who spend only a part of the year in the state, no children coming from without the state shall be admitted to the schools until they have been in the state for at least two weeks and a certificate of freedom from disease signed by the city health officer or city physician, in cities where there is such official, and for those localities outside such jurisdiction, by a duly qualified physician, must be presented.

"Following a case of infantile paralysis, a certificate is required of the patient from either a city or county health officer or from a representative of the state board of health before admittance to school."

ANNOUNCE CHILD HEALTH DAY

The American Child Health Association of New York City has announced the annual child health day, to be observed throughout the country on May 1, 1928.

The challenge which May Day this year throws out to the country is to make the child's bill of rights a living reality in the lives of as many American children as possible. Thirty-five national organizations have pledged their permanent endorsement of May-Day objectives. These groups, combined with health and educational authorities, and with the American Federation of Labor, the Department of Agriculture, and chambers of commerce make up a powerful unit which should lead on toward the seven definite goals which have been set up as the objective of the work.

ENDEMIC GOITER AMONG SCHOOL CHILDREN

Dr. Robert Olesen, surgeon of the U. S. Public Health Service, in a recent report, gives the results of a study of endemic goiter among school children in the states of Minnesota, Oregon, Colorado, Montana, Connecticut, and Massachusetts, and in the city of Cincinnati. The data presented is not sufficiently complete to give a more accurate understanding of the cause of the malady and the application of prophylactic measures.

The incidence of goiter among boys and girls examined in Minnesota, Cincinnati, Oregon, Colorado, Montana, Connecticut, and Massachusetts has been displayed graphically in a chart showing the percentages of endemic thyroid enlargement among 55,179 boys and 70,307 girls in 192 localities in six states and one city included in the study. The greatest proportionate difference between the percentages of goitrous involvement in boys and girls is found in Connecticut and the least in Colorado. In the states studied, the greatest percentage of goiter was found among the girls of Minnesota and the least among the girls of Massachusetts. Goiter prevailed to about the same extent among the girls of Cincinnati and Oregon. In Colorado, Montana, and Connecticut approximately the same incidence of goiter prevailed among the girls, though the rates are less than in Minnesota, Cincinnati, and Oregon.

The report shows that goiter was most frequent among the boys examined in Minnesota, and least frequent among those of Connecticut. In Cincinnati and Colorado, the rates among the boys were about the same. In Oregon, Montana, and Massachusetts, the goiter rates among boys were less than in Colorado, in the order named.

In a study of the variations in degrees of thyroid enlargement among 46,598 boys and 52,166 girls in 131 communities, it was noted that slight enlargements were more frequent among the girls than among the boys of Minnesota, Cincinnati Oregon, Massachusetts, and Connecticut. The order of frequency of slight enlargement among the boys of the five sections was Minnesota, Cincinnati, Oregon, Massachusetts, and Connecticut, the first named state having the greatest amount.

It was also noted that the degrees of thyroid enlargement are most frequently encountered in Minnesota. When compared with slight enlargement, the rate of frequency is much higher among girls than among boys. In Minnesota, Cincinnati, Massachusetts, Oregon, and Connecticut, the ratios between percentage incidence of moderate and marked enlargements combined among girls and boys were 4.1 to 1; 4.2 to 1; 5.7 to 1; 12.5 to 1, and 82.4 to 1, respectively. Moderate and marked thyroid thickenings are frequent among the girls of Oregon, Massachusetts, and Connecticut, and also rare among the boys of those states.

The differences in goiter incidence in the several states are shown for each age group, by sex, according to the degrees of enlargement. The greater incidence among girls, the similarity in trends, the decrease in prevalence among the boys of the higher ages, and the maintained increase among the girls are clearly shown.

(Concluded on Page 110)

I am a footstep
—a wasted footstep.
Left here by the principal
in a bad frame of mind. But I
don't blame him for feeling as he
does the way he must go from class-
room to classroom. . . . . He says,
and he's quite right, that Inter-
Phones would save him—and a lot of
other folks in the school—all this useless
trotting 'round. He says that if there were
an Inter-Phone system here he could spend
more time at his desk doing more of the
really important things that count in a prin-
cipal's life. The other day, I overheard a man
talking about Inter-Phones. Said he was a
specialist from Graybar Electric, and that he
could show how to put Inter-Phones in, and
how they'd save time and foot-steps like
me. Hope he talks to the school board.

P.S. Let a wasted footstep strongly recommend Graybar Inter-Phones because they are the surest, the most dependable and cheapest-in-the-end means of doing away with wasted footsteps. . . . . Inter-Phones carry a name that stands for quality in electrical equipment and we footsteps respect the value of that name.

IF EVERY wasted footstep could be called to the bar, what a case for step-saving that would be . . . and how few schools would lack Inter-Phone Systems.

It is interesting to note, incidentally, that along with the growing use of Inter-Phones, another form of inter-room communication is coming into well-merited demand.

The Public Address System is proving its importance as a transmitting apparatus for music, speeches, gym commands, fire drills, etc., into all rooms at once. *Both the Inter-Phone and Public Address System are on display at the Annual Convention, Department of Superintendence, National Education Association, Booth 17.*

The handy Inter-Phone

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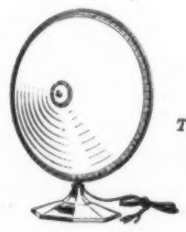
THE GRAYBAR TAG—SYMBOL OF DISTRIBUTION



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(Concluded from Page 108)

The study concludes with the statement that endemic goiter is apparently more common in some portions of the middle west than in the Pacific northwest. A comparison of the goiter rates in Minnesota, Cincinnati, Oregon, Colorado, Connecticut and Massachusetts shows the prevalence of the disease in these localities in the order named, the greatest incidence being in the state named. Slight enlargements were noted in approximately the same relative proportion among the boys and girls of the four states and one city surveyed by the U. S. Public Health Service, and considerably more frequent among the girls. Goiter of marked size is quite infrequent among the girls and rare among the boys of Oregon, Massachusetts, and Connecticut.

It is brought out that in the training of examiners in diagnostic procedure, there is need for a reasonable amount of practice, interest, and care in order to effect an improvement in the records gathered in the future.

HYGIENE AND SANITATION

The board of education of White county, Ind., has under consideration the employment of a full-time nurse. Some thirty counties in Indiana have already inaugurated the idea with apparent success in each instance. There are a hundred things a well-qualified nurse can do in a supervisory capacity in and through the schools of the county that will have a splendid effect on the general health of the pupils and the benefit of any movement that will improve the general health of the several thousand school pupils can not be measured in dollars and cents.

—In a campaign against diphtheria in Georgia, about 125,000 children were immunized through cooperation of the school authorities, the state board of health, and parent-teacher associations. About 50,000 of the children were treated privately. A total of 7,650 Schick tests were made to determine immunity against diphtheria.

—Twenty-one of the playground gifts offered to growing communities by the Harmon Foundation during 1927 have been granted, according to a recent report issued by the Harmon Foundation News Bulletin. With but three exceptions, the maximum contribution of $2,000 from the Foundation is bein made. Two more communities are yet to be selected from the applications submitted. The awards already made are those at Talladega, Ala.; Phoenix, Aiz.; Fayetteville, Ark.; Dalton, Ga.; Ottumwa, Iowa; Garden City, Kans.; Frederick, Md.; Auburn, N. Y.; Tryon, N. C.; Bellevue, Ohio; Lawton and Waurika, Okla.; Kennett Square, Lock Haven, Punxsutawney and Souderton, Pa.; Charleston, S. Car.; Newbern and Lewisburg, Tenn.; Decatur, Texas, and Tacoma, Wash.

SCHOOL INSTRUCTION FOR DEAF PUPILS

What shall the city schools do for children totally deaf, who are sometimes called deaf and dumb? What are the ages of the pupils who enter the classes, what is the average size of a class, and how are the children housed? These are some of the questions involved in a study of the subject.

In order to arrive at the facts, the research division of the National Education Association recently sent out a questionary on the subject to the school authorities in 54 of the largest cities of the country.

The study reveals that in 12 cities deaf children are taught in separate buildings; in 23 cities they are segregated in special rooms; and in 14 cities no special instruction is offered.

The median size of the class handled by a teacher is 15; the average is 8; the largest number is 15; and the smallest is 3 or 4 pupils. It was found that two cities had 5 pupils or less; 15 cities had 9 to 10 pupils; five cities had 11 to 12 pupils; and three cities had 13 pupils or more.

In 28 cities teachers of the deaf are paid a higher salary than are teachers of normal pupils. The median salary is less than $100 in one city; 12 cities pay from $100 to $199; one city pays $200 to $299; two cities pay from $300 to $499, and one pays $500 to $599.

In one city the minimum salary is less than $100; in 12 cities it is $100 to $199; in one city it is $200 to $299; in two cities it is $300 to $399; in one city it is $400 to $499; and in three cities it is $500 to $599.

In seven cities the maximum salary is less than $100; in seven cities it is $100 to $199; in one city it is $200 to $299; in three cities it is $300 to $399; in one city it is $400 to $499; and in three cities it is $500 to $599.

The earliest age at which pupils are permitted to enroll in special rooms for the deaf is 3 years, and the latest age is 8 years. In six cities the entering age is 3 years; in eight cities, 4 or 4½ years; in 12 cities, 5 years; in nine cities, 6 years; in two cities, 7 years; in one city, 8 years.

In 39 cities, deaf children are taught lip reading, while only one city teaches children by the sign language.

THE OLD SCHOOLHOUSE AT VALLEY FORGE, PA.

DURABILT STEEL CABINETS

Built for Years of Service and Protection

For years Durabilt equipment has been recognized for its unusual service and economy, its practical design, rugged construction and exceptional strength. The Educational Buyer will find that Durabilt Storage and Wardrobe Cabinets fully meet his demands. A close inspection will reveal many important qualifications that insure protection and storage satisfaction.

The Durabilt Line of Steel Cabinets has been designed to permit an almost endless variety of interior equipment combinations for varied storage applications.

This unlimited adaptability is due to the fact that the full width shelves are adjustable on 1" centers; vertical partitions can be inserted without the necessity of drilling any holes; and the half shelves which are then used are also adjustable on 1" centers. Durabilt Cabinets are available in various widths, depths, and heights. The line covers cabinets in both one and two-door types, as well as cabinets without doors.

Durabilt Cabinets are finished in "Satin Texture" olive green baked enamel—a shade that harmonizes with any interior trim.

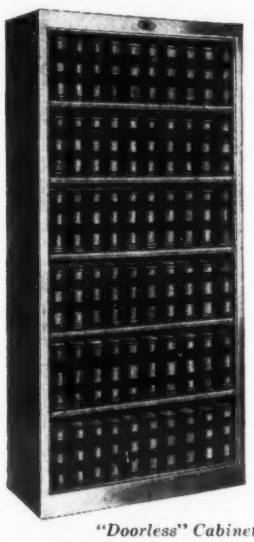
Write for prices and complete information.

Stationery Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	78"
36"	21"	78"

Dimensions Are Overall



"Doorless" Cabinet

Preferred Sizes

Width	Depth	Height	
36"	21"	78"	Storage Cabinet
36"	18"	78"	Storage Cabinet
36"	12"	78"	Book Cabinet

Dimensions Are Overall

Counter High Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	42"
36"	21"	42"

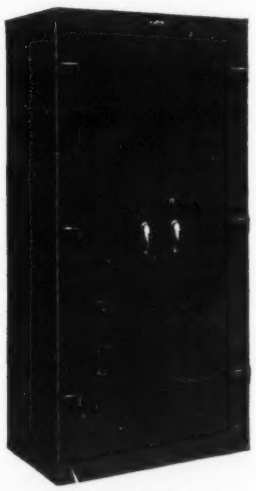
Dimensions Are Overall

Teachers' Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	78"
36"	21"	78"

Dimensions Are Overall

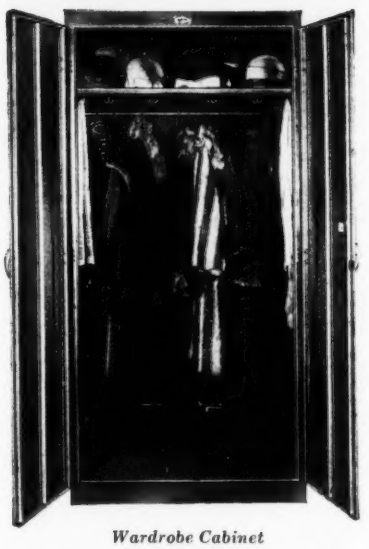


Storage Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	78"
36"	21"	78"

Dimensions Are Overall



Wardrobe Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	78"
36"	21"	78"

Dimensions Are Overall

Janitor's Cabinet

Preferred Sizes

Width	Depth	Height
36"	18"	78"
36"	21"	78"

Dimensions Are Overall

Desk High Cabinet

Preferred Sizes

Width	Depth	Height
19½"	18"	30½"
19½"	21"	30½"

Dimensions Are Overall

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DURABILT STEEL LOCKER CO.

400 ARNOLD AVE., Sales Offices in all Principal Cities AURORA, ILL.

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THE first interior painting product ever to make this claim—*replacing both paint and enamel.*

A claim fully justified by the facts, for hundreds of fine buildings are now using Barreled Sunlight to replace enamel—as well as for painting jobs.

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Guaranteed to remain white longer than any gloss paint or enamel, domestic or foreign, applied under the same conditions.

Extremely easy to tint. Oil colors blend readily with the oil base of Barreled Sunlight.

Sold in cans and drums. Gloss, Semi-Gloss, and Flat finishes. For priming, use Barreled Sunlight Undercoat. See coupon below.

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By mixing oil colors with Barreled Sunlight the painter can obtain any desired shade for interior painting. Dealers carry handy tubes of Barreled Sunlight Tinting Colors for use on small jobs.

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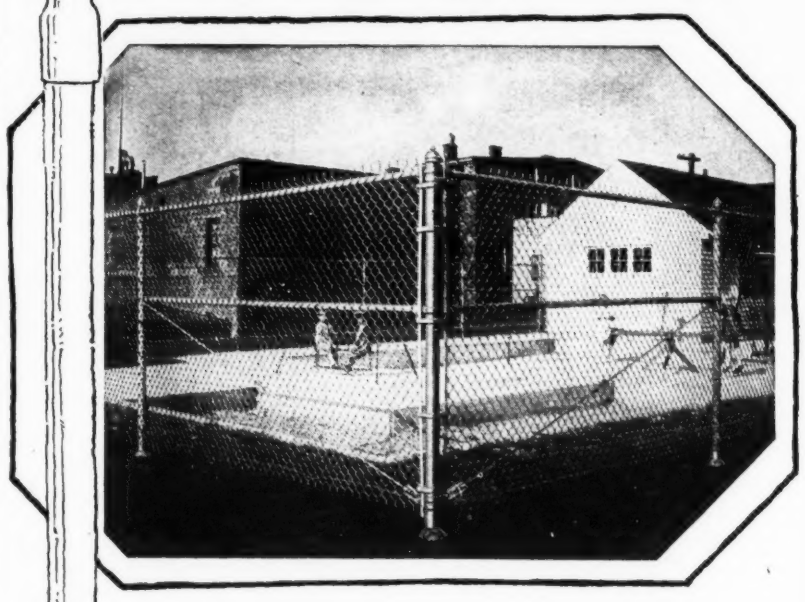
U. S. GUTTA PERCHA PAINT CO.
44-B Dudley Street Providence, R. I.
Please send us your booklet "Interiors of Lasting Whiteness." and a panel painted with Barreled Sunlight.

Name .....

Street .....

City ..... State .....

Stewart FENCES



A Paying Investment

SCHOOL fencing is a part of the permanent school plant and is as essentially a matter of buying for permanence as is the purchase of the heating or ventilating equipment. It is not a question of first cost per foot but of cost per foot per year of service.

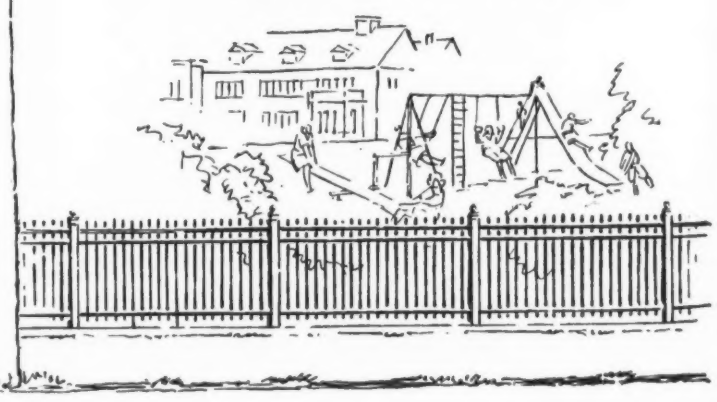
STEWART FENCING—whether of copper-bearing-steel chain link fabric, or of wrought iron—is designed to afford permanent protection. It is right, in design and construction, whatever the style preferred.

Beyond this, however, is the very important matter of proper installation—that sound fence value may not be sacrificed by make-shift erection. Here our staff of fence specialists functions—as consultants or as actual erectors, as the customer prefers.

Let us confer with you on this question of school upkeep economy. Send for your copy of our School Fence Catalog—or let our local fence man call—without obligation in either case.

IRON FENCE
ENTRANCE GATES
CHAIN LINK FENCES
WINDOW GUARDS

The Stewart Iron Works Co., Inc.
420 Stewart Block Cincinnati, Ohio
Representatives in all Principal Cities



Trenton N. J. Schools Saved $2,850!

Mr. R. T. Backus, Sup't of B'ld'gs. reports that Trenton Schools were saved $2,850 on one job refinishing desk-tops with the Clarke Vacuum Portable Sander.

The CLARKE refinishes 120 to 200 desk-tops a day—removes all the scars and digs and scratches—makes them ***new!*** Old dingy, varnished flooring, the CLARKE makes beautifully smooth and new at the rate of 300 to 800 square feet a day; on better flooring, the CLARKE finishes up to 1600 square feet in eight hours.

Easily carried to the job with one hand—running off any light socket — this powerful, fast-cutting sander works anywhere at a great saving.

Many schools use it during the week as an instructional machine in modern industrial sanding methods. Stimulates interest in Manual Training work. A great time and labor saver on all sanding work — from rough, fast cutting to fine cabinet finishing. ***Absolutely dustless*** in operation — it protects the health and clothing of classes.

For eleven years, originators and manufacturers of portable sanding machines.

BOARD OF EDUCATION
ADMINISTRATION BUILDING
TRENTON N. J

December 8, 1925

Clarke Sanding Machine Co.,
618 W. Lake St.,
Chicago, Ill.

Gentlemen:

Attention Mr. A. A. Clarke

We are having great success with the Portable Sanding Machine we bought from you about a year ago.

Last summer we resurfaced about 3,000 pupils' desks at an average cost of 45¢ each. This included shellac and varnish so that the desks were finished entirely, and made as good as new. The year before this work was done under contract at $1.40 per desk and the results did not compare with our own work at one-third the cost. Most of the desks were in very bad condition, not surface scratches, but deep gouges, all of which were removed. In the future this work will be done before the desks get in such bad shape and I am sure the above cost can be cut considerably. We used one machine and two high-class mechanics on this work.

At the present time we are using your machine on the floors at the Administration Building. They are in terrible shape, having in the past thirty years been covered with floor oil, stain, and varnish a great many times. We are bringing them back to a natural finish with your machine, putting on two coats of white shellac, a coat of floor varnish, and waxing at a total cost of a little over 10¢ a square foot. It is changing our building from a dingy and drab place into a bright, clean office building that we are enjoying immensely.

This is hard going for your machine but it is standing up to it in great shape. There is no comparison between this sort of work and new floor work so I have no idea what the daily square foot average of the machine would be, but certainly much greater than it is possible to get on these old floors.

We appreciate the various services you have rendered us and will be glad to recommend your machine for similar purposes.

Very truly yours,
R. T. Backus
R. T. Backus,
Supt of Bldgs

RTB/A

"Dollars and cents" proof that the CLARKE saves considerably on maintenance work.

✓ ✓ ✓

Find out how you can save on maintenance work as the Trenton School-Board does—find out how you can provide the Manual Training department with an instructional machine that costs you nothing. Get the facts — get them NOW! Mail the coupon!

Clarke Sanding Machine Co.
Dept. G-22, 3821 Cortland St.
Chicago, Ill

Clarke Sanding Machine Co.,
Dept. G-22, 3821 Cortland St.,
Chicago, Ill.

Please send me all the facts on the Clarke Vacuum Portable Sander. No obligation to me.

Name .....

Address .....

City .....

State .....

CHICAGO CORRESPONDENCE

William McAndrew is now a "holdover, suspended superintendent." His term officially expired on January 8, although his trial is, at the date of going to press, not terminated. If he is acquitted, or if the courts decide later in his favor, he will be entitled to back pay, even over this "holdover" period. However, newspapers have interpreted utterances of the superintendent to mean that he may not accept the back salary anyway. Meanwhile Mr. McAndrew intends to continue to live in Chicago. "Why should I leave Chicago?" he asked. "This is a colorful city of brilliant people. I like it here and I shall stay. I plan to devote my time to study. Chicago offers excellent facilities to the student. The public library is a good place. I shall study politics in the public library."

There have been four items of interest in recent sessions of his trial. (1) Many principals and teachers have given testimony against the one-hundred-per-cent accuracy drive in arithmetic inaugurated by Mr. McAndrew. Charges of unfairness in the tests, unfairness in the administration of them, that they created nervousness in pupils and teachers alike, and that they were educationally unsound, were made. (2) Several persons testified that the superintendent ruled with "an iron hand" and was a modern Simon Legree. He was alleged to have said that principals and teachers who could not bring their pupils to the one-hundred-per-cent mark should give way to others who could so. A classroom teacher stated before the trial board, "Life for the teachers of the Chicago schools during the three years of McAndrew's reign is what Sherman called war. Since Mr. McAndrew has been suspended it has been more like heaven because we haven't had to meet the one-hundred-per-cent requirements." (3) According to the newspapers, one principal accused the suspended superintendent of being "rude, profane, boisterous, slangy, undignified, and injudicial." "Oh Lord, where did you get that?" was one of the questions he asked her on a visit to her school. "I betcha fifty cents you don't get it," was another expression he used at her, she testified. "When he gave a music test, he handed out an exercise and told the pupils to 'eat it.'" the principal related. (4) Though known as an avowed enemy of politics in the schools, Mr. McAndrew was charged with having played politics in the recent mayoralty election. Stenographers testified that he compiled a pamphlet on "Accomplishments of the School Boards Appointed by Mayor Dever" but that a prominent member of a women's civic club signed it.

At the conclusion of the testimony of a group of school people, the president of the school board commented, "I cannot but remark on the beautiful sentiment of simplicity, honesty of purpose, and integrity demonstrated here tonight in the hearts of the men and women who testified. It is one of the most gratifying spectacles in the history of my school-board experience of six years, and I thank God for the real, human, honest people in the Chicago public schools."

A so-called "Public School Emergency Committee" has been organized under the leadership of Rev. Charles W. Gilkey of the Chicago Church Federation and Rabbi Louis L. Mann of Sinai Temple. It has a long list of members many of whom are more or less prominent in Chicago civic affairs, and it purports to having the backing of seventeen civic organizations. Most of the committee's personnel seems to be made up of persons who opposed the election of the present mayor, and have been "anti" since his election. The Emergency Committee issued a statement at the time of its organization in which the following was said:

"The Public School Emergency Committee representing a large number of civic and religious organizations, has united its forces to get and keep the Chicago public schools out of politics.

"The committee is independent of any partisan or personal interest, but is convinced that the present publicity in connection with the alleged 'trial' of Supt. McAndrew is a smoke screen, designed to distract and confuse the citizens of Chicago.

"The Committee is determined to find out what is going on behind this smoke screen, and to bring together for common counsel and action all those who want to see the Chicago public schools administered in the interest of the children themselves.

"Since the inauguration of the present city administration, politicians have seized control of the school board. By one move alone, 2,700 janitorial positions in the schools were turned over to ward bosses to fill, under sixty-day appointments, and the civil service commission apparently has no immediate intention of holding examinations to fill these places in accordance with the merit law.

"Hundreds of clerical positions also were turned over to the politicians and their friends. Political considerations apparently have superseded the merit system of appointment in practically every branch of our school system. The spoils system is more firmly intrenched in the schools than ever before in their history.

"As a result of these conditions, Chicago is to arouse a militant public spirit that eventually will drive the politicians out of the school system."

The president and another member of the school board have recently resigned from their positions to devote full time to their board-of-education duties. Simultaneously with the president's announcement, the newly formed "emergency committee" issued a scathing broadside at him.

A third bulletin by the "emergency committee" commended the minority members of the school board—Walter J. Raymer, Mrs. Helen S. Hefferan, Dr. Otto L. Schmidt, and Jane Mullenbach. Mr. Raymer and Dr. Schmidt had recently announced their intention to resign in the near future, after the conclusion of the McAndrew trial.

An item of unusual interest bobbed up at the last session of the McAndrew trial when the school-board attorney read a letter from Allan B. Pond, architect and former president of the City Club of Chicago, to William McAndrew. It seems that Mr. Pond wrote a letter to Mr. McAndrew at the time of his election as superintendent of schools in which he named each school trustee and characterized the traits of each. This letter was taken from Mr. McAndrew's private files, according to the testimony of a stenographer, and it was read at the trial.

—Supt. S. M. Andrews, of Walsenburg, Colo., has been elected president of the Colorado Education Association. Mr. Andrews succeeds C. E. Brown, who has become vice-president of the association.

—Mr. J. L. Joslin has been elected purchasing agent for the school board of Dallas, Tex. Mr. Joslin succeeds Mr. M. F. Foote who has taken a position in Chicago.

"Viking" Folding Chairs — Mean Fewer Replacements

"Viking" Indestructible Folding Chairs cost little more than the ordinary wooden chair.

They're Indestructible

You cannot afford to be buying new chairs every few years. It's too expensive a proposition. Why not install "Viking" Chairs that will last a lifetime? You can't break them or bend them out of shape. They're built entirely of 20 gauge steel and reinforced at all the vital points. This all-steel construction likewise makes "Viking" fireproof and absolutely dependable under trying conditions.

Comfortable, Too

Besides being rugged and strong "Viking" chairs have been so designed that comfort is also a paramount feature. It has been built into these chairs. With their inclined backs, "Vikings" insure that perfect comfort which is not to be found in any other folding chair. The fibre seat and the full upholstered seat provide an extra amount of comfort.

Write for complete information.

MAPLE CITY STAMPING CO., Peoria, Ill.

WASHINGTON CORRESPONDENCE

A. C. Monahan, Formerly of U. S. Bureau of Education

Practices in City School Administration

Certain Practices in City School Administration is the title of a new leaflet of the U. S. Bureau of Education to be available about the first of February. The pamphlet is by W. S. Deffenbaugh, chief of the City-Schools Division of the Bureau, and presents data on the following topics related to city-school administration: The board of edution—number of members, how chosen, length of term for which members are elected or appointed, district from which elected or appointed, when elected, relation to the city government, standing committees of the board, president of the board, secretary or clerk of the board, treasurer; superintendent of schools; deputy, associate and assistant superintendents; business manager, superintendent of school buildings; elementary-school principal, supervisors and the certification of teachers.

Tables showing current practice in each of the cities reporting have not been included in the report, a few tables, however, have been included to show the changes that have taken place in certain cities from 1902 to 1917 to the present time in regard to the size of boards of education, tenure of board members, and the number of standing committees.

The summary of the data on each topic is generally accompanied by a summary of opinion concerning the best practice in city-school administration, as interpreted from textbooks on school administration, current educational magazines, and city-school surveys.

This leaflet is a supplement to the bulletin published by the Bureau in 1917 entitled "Current Practices in City School Administration," brings the information up to date, and offers comparisons over the ten-year period.

U. S. Bureau of Standards Plaster and Stone Tests

Two series of tests undertaken by the U. S. Bureau of Standards are of especial interest to those charged with the responsibility of erecting school buildings. One has to do with the effect of wetting on the adhesion of gypsum plaster to gypsum plaster board.

Previous work at the bureau demonstrated the fact that the bond between gypsum plaster board and properly applied sanded-gypsum plaster is sufficiently great to allow of plaster board being used as backing for plaster in construction work. In case of fire, leaky roofs, or faulty construction, plaster backings are often exposed to accidental wetting. As much confusion exists relative to the effect of such accidental wetting upon the bond between gypsum plaster board backing and gypsum plaster, the bureau undertook a series of tests to determine the extent of this effect.

Panels 9 inches square of 2:1 sanded-gypsum plaster were applied to single-ply gypsum plaster board, the plaster board being a commercial product obtained on the open market. Before application of the plaster the board was securely fastened to a solid wood frame by nailing, the nails being spaced 3 inches apart. Embedded in the plaster of each panel was a perforated steel plate, supplied with a mechanism for attaching the whole in a testing machine so that the plaster could be readily pulled free from the backing.

After drying, the various panels were wetted by soaking under water for five minutes. Two samples were tested immediately for adhesion, the remainder being stored in the laboratory to dry for periods of time ranging from one to four weeks before being tested.

The adhesion in pounds per square inch is as follows: Those tested immediately, 2.99 lb. per square inch; those at the end of two weeks, 6.04 lb.; at the end of four weeks, 7.50 lb. The adhesion of the unwetted samples was 6 lb. per square inch.

It will be seen that the strength of the bond between the plaster and the plaster board increases as the time allowed for drying is increased. Those panels given as unwetted were tested one week after application of the plaster, therefore, it is probable that they were not completely dry at the time of testing. It is interesting to note that the adhesive values of panels which were wetted, then dried for periods of two or four weeks are greater than the adhesion of the unwetted panels. It was also noted that those panels tested for adhesion immediately after wetting failed in tension in the fibers of the plaster board itself rather than at the juncture of board and the plaster. This indicates that it is the strength of the board rather than the strength of the plaster bond which determines the breaking point at this age.

These tests indicate that while wetting weakens the bond between gypsum plaster and gypsum plaster board, the full adhesive strength is regained as the materials again become dry.

Tests have been started at the bureau to determine the physical properties of precast stone with the object of preparing Federal specifications for this material. Samples were obtained from various manufacturers scattered throughout the United States giving 17 different varieties or types of stone. The preliminary tests decided upon were: Compressive strength of wet and dry specimens, modulus of rupture, modulus of elasticity, rate of absorption, porosity, and ability to resist weathering.

U. S. Government Master Specifications of the Bureau of Standards

School boards, superintendents, and business managers are using the Bureau of Standards master specifications in larger number each year. They are interested, of course, primarily in those of building materials, building equipment, and school supplies. Seventy-five masters' specifications have been issued by the bureau, and these may be obtained from the bureau by anyone interested.

An important adjunct to the master specification list is some recently prepared lists of "willing-to-certify" manufacturers. About 570 copies of sets of these lists have been distributed in mimeographed form, almost exclusively in response to specific requests from purchasing agencies, a total of more than 43,000 lists having been distributed up to November 25, 1927. The average number of "willing-to-certify" manufacturers on each list is about 21, the aggregate number of names of manufacturers on the 75 lists being 1,609. There are 684 separate, individual manufacturing firms represented on these lists, the manufacturers averaging 2.35 specified commodities each. Work is now going forward actively on the compilation of 76 additional lists of "willing-to-certify" manufacturers, making a total of 151 United States government master specifications to which the certification plan has been, or is being, applied.

(Concluded on Page 116)

BRANCHES IN ALL PRINCIPAL CITIES

FRED MEDART MANUFACTURING CO.

GENERAL OFFICES AND FACTORY
POTOMAC AND DE KALB STREETS
ST. LOUIS, MO.

February 1, 1928.

TO ALL SCHOOL OFFICIALS:

A sincere and cordial invitation is extended to all of you to visit the Medart exhibit at the N. E. A. Convention in Boston.

Our exhibit will be located in booths 151 and 152. There will be on display steel lockers, steel shelving, steel storage cabinets, gymnasium apparatus, and playground equipment. A truly wonderful display of quality products.

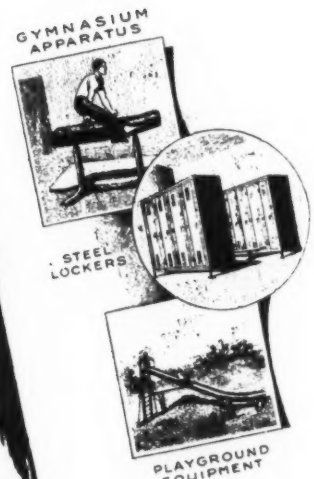
You will gather much useful information if you will take but a few moments and stop in to visit with us.

I also want to announce that our exhibit will be in personal charge of Mr. P. S. Medart, president of our company, who will have the assistance of a corps of especially trained men, thoroughly familiar with the needs of the school field.

Do drop in and become better acquainted.

FRED MEDART MANUFACTURING CO.

Walter A. Braun
General Sales Manager.



P.S. Bring your locker room, gymnasium, or playground problems with you, and let our engineers work them out for you in a preliminary way while you are in Boston.

Leading Schools Specify
NORTON
as the modern system of operating and controlling doors

THE NORTON CLOSERS WITH HOLD-OPEN ARMS ARE BEST SUITED FOR YOUR SCHOOLROOM DOORS . . . BECAUSE

THEY ARE SAFE

Uniform closing speed (adjustable from two minutes to two seconds) allows the pupils to pass through the doors without danger of being injured.

THEY ARE NOISELESS

Speed at the latch can be set to permit absolute quiet in closing.

THEY ARE EFFICIENT

When it is desirable to hold the door open at a predetermined position a slight pull will set it—or, being set—a slight pull will release it.

Just a Post-Card Will Bring Detailed Information or a Service Man for Free Consultation.

KENOSHA, WIS.
Central Senior High School

Here Is a Partial List of Leading Schools Who Have Specified Norton Equipped Doors.

Skinner Junior High School, Denver, Colo.
North East High School, Minneapolis, Minn.
Chicago Public Schoosl
Toronto Public Schools
East Side High School, Cincinnati, Ohio.
Cass Technical High School, Detroit, Mich.
Technical High School, Omaha, Nebr.
Bolton High School, Alexandria, La.
North High School, Omaha, Nebr.
Oliver Hazard Perry Junior High School, Cleveland, O.

Our exhibit in Booth No. 23, at the Convention of the Department of Superintendence, N. E. A., Boston, will interest you.

THE NORTON DOOR CLOSER CO.
2900-2918 N. Western Avenue, Chicago, Illinois

(Concluded from Page 114)

Supervision, Its Aims and Methods

Frank W. Ballou, superintendent of schools of Washington, D. C., recently appointed a committee of supervisors and principals to prepare a report on school supervision, including its purpose, the personnel, methods, and spirit. The following abstracts from the report made to the superintendent are of general interest.

The Purpose of Supervision. Supervision is leadership. The ultimate purpose of supervision is to secure to the pupil the best possible education. When analyzed this purpose is:

(1) To stimulate teachers and pupils toward right thinking and energetic action. To make each individual teacher and pupil feel that he must express his own personality and reaction to any given problem or situation rather than the reaction of the supervisor: To stimulate initiative and self-reliance.

(2) To develop in supervisor and in teacher knowledge of educational skill, breadth of view, and sympathy in supervision.

(3) To evaluate the work of the teacher and to improve teaching by constructive and sympathetic criticism and suggestion.

(4) To lend to an understanding of proper professional and ethical standards.

(5) To coordinate and correlate the work of different departments and different teachers. To eliminate waste effort and unnecessary duplication. To secure a maximum of cooperation, good feeling, and public spirit in the teaching corps and the student body. To enlist teachers and supervisors in cooperative effort.

(6) To evolve a curriculum which will permit the maximum of attainment with a minimum expenditure of time and effort. To secure a proper sense of educational values on the part of the teacher.

(7) To aim for a maximum of educational results from money expended for public education.

(8) To standardize the best physical and material conditions for the welfare of the pupil.

(9) To use discrimination in assignment of teachers to tasks for which they are best suited.

(10) To test and judge pupils as to their educational, physical, moral, and social condition and progress.

(11) To adapt teaching to individual difference in pupils.

(12) To emphasize the fact that education should be in part the outgrowth of sociological conditions.

Methods of Supervision. The *how* of supervision has been briefly discussed in connection with *by whom* but the methods may be distinguished and classified under definite headings as:

1. Classroom visits—observation of the teacher in action.
2. Conferences—general, group, individual.
3. Meetings—larger bodies with some formality.
4. Testing of pupils.
5. Bulletins.
6. Educational development through committee work; publication of school studies; participation by teachers in making courses of study; and the share given by the superintendent to his officials in the making of decisions as to regulation and management of affairs.

From the old supervision based upon personal judgment, and expressed in dictates from above, has grown the new supervision which aims to be free from bias, impersonal, and scientific.

Qualifications of the Supervisor. The many and varied duties of the supervisory job demand those personality traits essential to the influencing of men and women, and also special training for the job.

Personal Qualifications (in addition to professional):

A. Leadership, evidenced by:
   1. Ability to inspire teachers to high ideals and accomplishment.
   2. Ability to build a fine professional spirit and morale in his department.
   3. Ability to stimulate professional growth of teachers.
   4. Ability to so interpret to his community educational purposes and plans that the community may cooperate intelligently in the work of the school.
   5. Insight, tact, sympathy, moral stamina.
   6. Ability to grasp a situation and to decide quickly and accurately what should be done.
   7. Ability to shed details, passing them on to others in order that the leader may be freed for activities that others cannot perform.

B. Loyalty to:
   1. The system of which he is a part.
   2. The teachers he supervises.
   3. The children.
   4. The community he serves.

C. Creative ability: Belief in the dignity and worth of his work; and Industry.

The Spirit of the Supervisor. The success and quality of a supervisor's work is so largely determined by his sense of values, his standards, his broad scholarship, and his personal attitudes toward professional, social, and spiritual ideals both within and without the schoolroom that it is difficult to make a sharp distinction between the qualities of the worker and his supervisor to a very great extent. The spirit of the supervisor will be affected, too, by the conditions that make supervision necessary and by the goals to be achieved through supervision.

I. The Supervisor's Relation to His Teachers

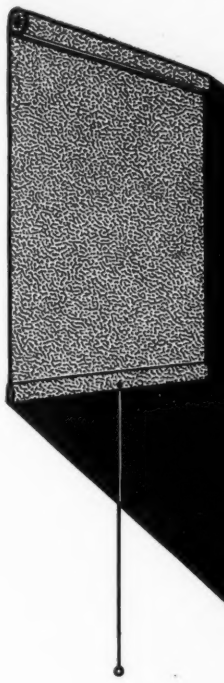
The successful supervisor will strive:

1. To win the confidence of his teachers through a frank discussion with them of the conditions that make supervision necessary.
2. To have teachers see themselves in their proper relation to the organization of which they are a part.
3. To establish a common basis of understanding of the goals to be achieved.
4. To accept his share of the responsibility for the attainment of the goals set up.
5. To make classroom visits a means of attaining these goals rather than an end in themselves.

II. The Supervisor's Attitude Toward His Work

The successful supervisor will strive:

1. To be scientific in his attitude toward his work, studying data and withholding conclusions until the facts are all in.
2. To be definite, working from and toward a program with clearly defined standards for achievement.
3. To be careful and discriminating in his sense of values, emphasizing big problems and underlying principles rather than trivial details.
4. To make his discussions of work:
   a) Professional—based upon principles of education, rather than emotional reaction.
   b) Impartial—a knowledge of conditions furnishing the background of criticism.
   c) Objective—teachers should feel that a piece of work and not a personality is under discussion.

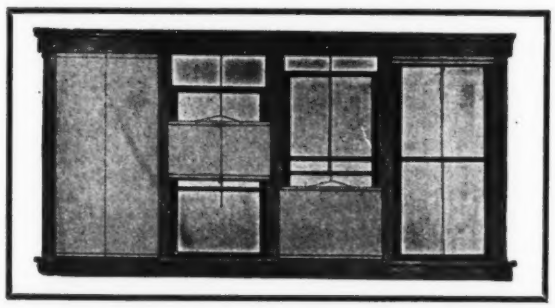


What is a Window Shade for ?

Not to shut out Natural Daylight

The Draper Adjustable Window Shade

is designed to *let-in* Daylight



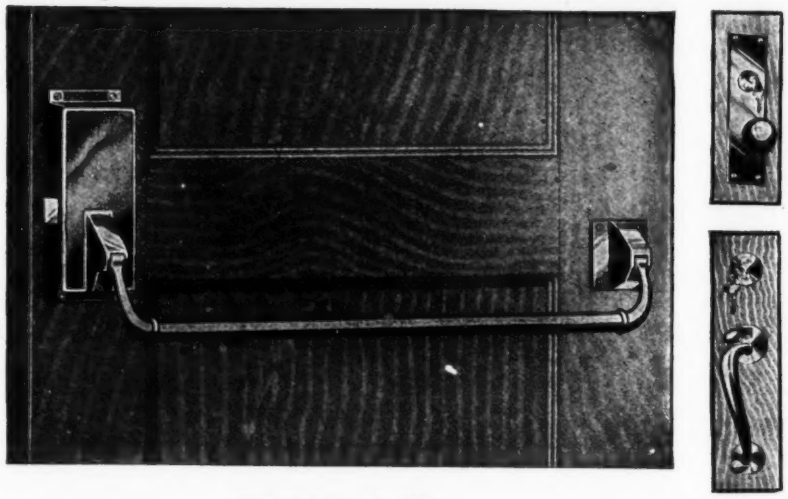
THERE'S little danger of letting too much *light* into a school-room—It's the *glare* that hurts. Draper Adjustable Window Shades will let in more natural daylight, and still prevent glare, than any other shade on the market. Fully adjustable, these shades are easier to handle than the ordinary inefficient kind and they are so carefully made of such high quality materials that they cut maintenance costs in half. It will pay you to write for descriptive literature.

LUTHER O. DRAPER SHADE COMPANY

SPICELAND - - - - - INDIANA

Smith's IMPROVED PANIC EXIT LOCKS

Smith's Improved Exit Locks are the Best Locks Made for Schools, Theatres, and Industrial Plants



Patented Dec. 1, 1925

Made in solid bronze or solid brass throughout. Exceptionally strong and simple in construction and operation.

Exit only Lock contains only 4 working parts.

Exit and entrance Lock contains 9 working parts.

Can be used on single doors or on double doors with center mullion. Size of case, 9 x 3¼ x 1½ in.

Installation made very quickly—No Mortising required.

No auxiliary bolt required, therefore no delicate movements.

Only one spring and that to eject bolt.

Positive locking feature operated with heavy gears, and not depending upon springs.

Permanent dog under cam, so constructed as to take up any wear which might occur.

Bolt projects ¾ in. from lock case, enabling bolt to have sufficient contact with strike in the event of door shrinking.

Ideal for thin as well as heavy doors.

Operates perfectly in conjunction with standard make of door closers.

Made to meet the use and abuse to which a school door lock is subjected.

NOW MADE BY **The Steffens-Amberg Co.** Newark, New Jersey

WRITE FOR CATALOG

NEW YORK CITY SALARY SCHEDULES

The New York City board of education on December 29 adopted the new pay schedules distributing salary increases amounting to $14,000,000 among members of the supervising and teaching staff, the custodial force, and the administrative and clerical staffs of the education department. The schedules were rushed to Albany and went into effect promptly on January 1.

The Administrators Schedule

The following increases were voted to the school supervisory officials:

	Present	New
Superintendent of schools	$20,000	$25,000
Superintendent emeritus	12,000	12,000
Associate superintendent	8,250	12,500
Member board of examiners	7,700	11,000
District superintendent	6,600	10,000
District superintendent acting as assistant to superintendent	8,000	11,250
Director of attendance	8,250	12,500
Assistant director of attendance	6,600	10,000
Director of reference, research, and statistics	8,000	10,000
Superintendent of libraries	5,000	6,000
District superintendent, junior high schools	....	11,000
Director vocational activities	7,500	8,500
Director extension activities	8,000	10,000
Director evening schools	7,000	10,000
Physicians for examining candidates	2,600	4,000
Chief medical examiner	4,500	7,500
Deputy medical examiner	....	6,500
Medical examiner	3,633	4,500
Aurist	....	2,500

First assistant director of reference, research, and statistics, $7,000; second assistant, $5,800.

Director of lectures and visual instruction, $6,600 to $7,000.

Assistant director of lectures, $4,500 to $5,000.

Assistant director extension activities, new minimum, $5,000; maximum, $6,000.

Assistant director evening schools, new minimum, $5,000; maximum, $6,000.

Assistant director continuation schools, new minimum, $6,500; maximum, $8,000.

Medical inspector of ungraded children, new minimum, $3,000; maximum, $4,000.

Supervisor of industrial work for boys in continuation schools, present rate, $4,200; new minimum, $4,000; maximum, $5,000.

Teachers assigned to school savings bank and thrift education, present rate, $3,625; new minimum $3,500; maximum, $4,500.

Business Department Salaries

The more important salary increases in the administrative groups are:

Office of the secretary	Present	New
Secretary	$ 9,000	$12,500
Assistant secretary	6,000	7,500
Chief clerk	4,000	4,500
Chief of personnel	4,000	5,000
Trial stenographer	4,000	5,000
Confidential secretaries, bureau of finance	3,528	4,000
Auditor	9,000	12,500
Deputy auditor	6,000	7,500
Chief clerk, office of superintendent	4,800	5,300
Executive assistant	7,000	7,500
Secretary, board of superintendents, board of examiners	4,000	4,500
Secretary, bureau of supplies	3,528	4,500
Deputy superintendent	4,700	6,000
Chief clerk	4,500	5,000
Fuel engineer	4,500	5,000
Chief fuel inspector, bureau of construction and maintenance	3,528	4,000
Chief clerk, bureau of plant operation	6,000	6,500
Superintendent of plant operation	8,000	12,500
Chief clerk	4,500	5,000
Chief, heating and ventilating division, bureau of attendance	5,500	6,000
Chief clerk	3,528	4,000

The New Grade Schedules

Below are the new schedules adopted by the board of education:

Schedule 1-A, kindergartners and teachers of 1-A to 6-B classes:

First year, present salary, $1,500; new salary, $1,608; second year, present, $1,625; new, $1,740; third year, present, $1,750; new $1,872; fourth year, present, $1,875; new $2,004; fifth year, present, $2,000; new, $2,136; sixth year, present, $2,125; new, $2,268; seventh year, present, $2,250; new, $2,400; eighth year, present, $2,375; new, $2,532; ninth year, present, $2,500; new $2,664; tenth year, present, $2,625; new, $2,808; eleventh year, present, $2,750; new, $2,964; twelfth year, present, $2,875; new, $3,144; thirteenth year, new salary, $3,324; fourteenth year, new salary, $3,504.

Schedule 1-C, Teachers of special subjects: First year, present salary, $1,900; new salary, $2,040; second year, present, $2,050; new, $2,196; third year, present, $2,200; new, $2,352; fourth year, present, $2,350; new, $2,508; fifth year, present, $2,500; new, $2,664; sixth year, present, $2,650; new, $2,820; seventh year, present, $2,800; new, $2,976; eighth year, present, $2,950; new, $3,132; ninth year, present, $3,100; new $3,288; tenth year, present, $3,250; new, $3,444; eleventh year, present ....; new, $2,600; twelfth year, new, $3,900; thirteenth year, new, $4,200.

Teachers of classes below 7-A, assigned as senior teachers, will be paid $150 in addition to the rate fixed in schedule 1-A.

The new schedule 1-D for teacher-clerks provides an annual increase of $100 as at present, but the maximum of $1,900 in the eighth year changed to a new maximum of $2,300 in the tenth year of service. The minimum is $1,400.

Similarly, the schedule 1-E for teacher-clerks assigned to parental schools starts at $1,560, with annual increments of $130, which raise the present maximum of $2,340 in the seventh year to $2,730 in the tenth year of service.

Schedule 1-J, Assistants to principals:

First year, present, $3,400; new, $3,600.
Second year, present, $3,500; new, $3,500.
Third year, present, $3,500; new, $3,804.
Fourth year, new, $4,212.
Fifth year, new, $4,416.
Sixth year, new, $4,620.

Schedule 1-K, Assistants to principals in charge of independent schools and deaf classes:

First year, $3,900; second year, $4,104; third year, $4,104; fourth year, $4,512; fifth year, $4,716; sixth year, $4,920.

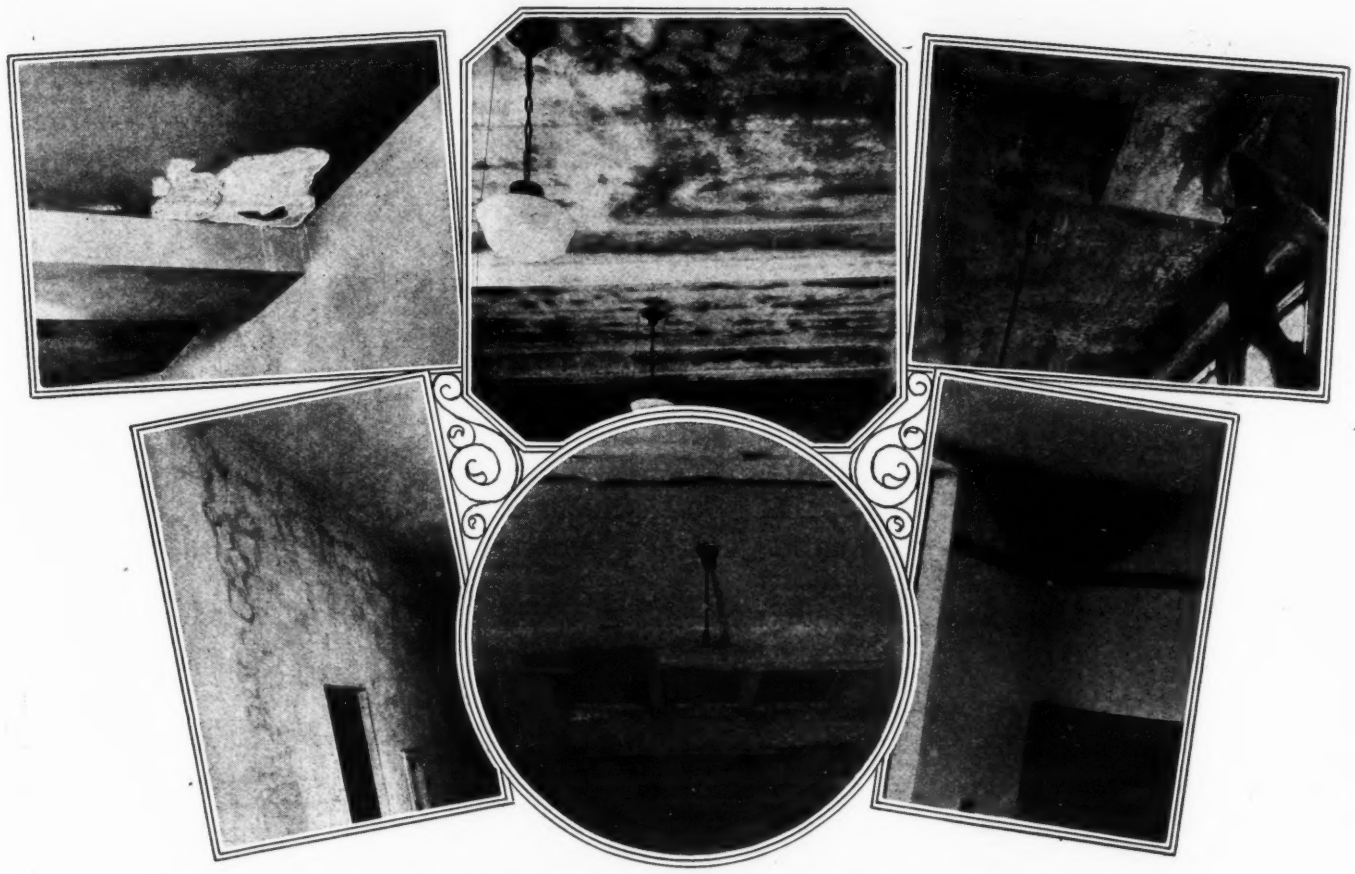
Schedule 1-B, teachers of junior-high-school grades:

First year, present, $1,900; new, $2,040; second year, present, $2,050; new, $2,196; third year, present, $2,200; new, $2,352; fourth year, present, $2,350; new, $2,508; fifth year, present, $2,500; new, $2,664; sixth year, present, $2,650; new, $2,820; seventh year, present, $2,800; new, $2,976; eighth year, present, $2,950; new, $3,132; ninth year, present, $3,100; new, $3,288; tenth year, present, $3,250; new, $3,444; eleventh year, new, $3,600; twelfth year, new, $3,900; thirteenth year, new, $4,200.

Schedule 1-B, teachers of grades 7-A to 8-B subsequent to Jan., 1928:

First year, present, $1,900; new, $2,040; second year, present, $2,050; new, $2,196; third year, present, $2,200; new, $2,352; fourth year, present, $2,350; new, $2,508; fifth year, present, $2,500; new, $2,664; sixth year, present, $2,650; new, $2,820; seventh year, present, $2,800; new, $2,976; eighth year, present, $2,950; new, $3,132; ninth

(Concluded on Page 120)



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751 South Cassingham Rd.
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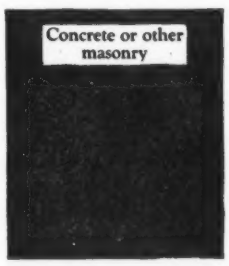

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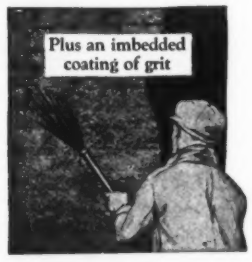
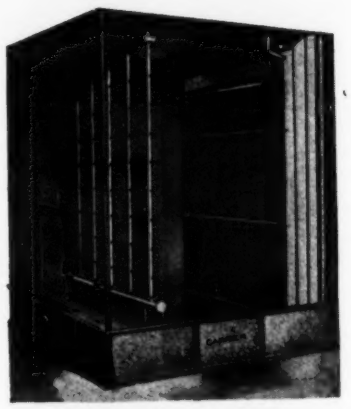


Complete heating and ventilating



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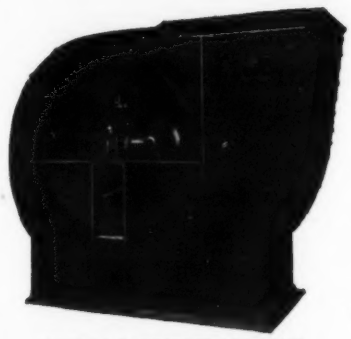

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for central heating and ventilating systems.

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The New Pawtucket Senior High School, Pawtucket, R. I., uses five Buffalo Duplex Conoidal Fans and two Carrier Air Washers.

(Concluded from Page 118)

year, present, $3,100; new, $3,288; tenth year, present, $3,250; new, $3,444; eleventh year, new salary, $3,600; twelfth year, new, $3,900.

Increases for Principals

Principals of day high schools and training schools having fifty or more teaching positions, now paid $5,500 to $6,500, will be paid a minimum of $8,000 and a maximum of $10,000 in the fifth year, with annual increments of $500 each.

Principals of high and training schools having fewer than fifty teaching positions will be paid $7,500 in lieu of the present rate of $5,000. It is provided that a principal of a high school having supervision of junior high schools shall receive a salary not less than that to which such a principal is entitled as principal of a junior high school of the same number of classes.

Principals of vocational or trade schools, now paid a minimum of $4,800 and a maximum of $5,200, will be paid $6,000 to $7,000 if in charge of schools of 25 to 48 classes, $6,500 to $7,500 if in charge of schools of 49 to 84 classes, and $7,000 to $8,000 if in charge of schools of 85 or more classes.

Principals of elementary schools having 25 to 48 classes, and practice schools having 18 to 48 classes, $5,000 to $6,000.

Principals of junior high schools, or schools having 48 to 84 classes, and schools for crippled or probationary, having 25 to 48 classes, $5,500 to $6,500.

Principals of elementary schools, having 49 to 84 classes, $5,500 to $6,500.

Principals of junior-high-school departments, having 48 to 84 classes, and schools for the deaf, crippled and probationary schools, $6,000 to $7,000.

Principals of elementary schools having 85 or more classes, $6,000 to $7,000.

Principals of junior high schools, having 85 or more classes, $6,500 to $7,500.

Principals of continuation schools, having 25 to 48 classes, $6,000 to $7,000; of 49 to 75 classes, $6,500 to $7,500; of 76 or more classes, $8,000 to $9,000.

Principals of parental schools, with maintenance, $5,500 to $6,500.

High-School Schedules

Schedule II-A, assistant teachers in day high schools:

First year, present, $1,900; new, $2,148; second year, present, $2,050; new, $2,304; third year, present, $2,200; new, $2,460; fourth year, present, $2,350; new, $2,616; fifth year, present, $2,500; new, $2,772; sixth year, present, $2,650; new, $2,940; seventh year, present, $2,800; new, $3,108; eighth year, present, $2,950; new, $3,276; ninth year, present, $3,100; new, $3,444; tenth year, present, $3,250; new, $3,624; eleventh year, present, $3,400; new, $3,804; twelfth year, present, $3,550; new, $3,996; thirteenth year, present, $3,700; new, $4,188; fourteenth year, new, $4,404; fifteenth year, new, $4,656.

Schedule II-B, first assistants in day high schools:

First year, present, $3,200; new, $4,308; second year, present, $3,400; new, $4,584; third year, present, $3,600; new, $4,860; fourth year, present, $3,800; new, $5,136; fifth year, present, $4,000; new, $5,412; sixth year, present, $4,200; new, $5,688.

Supervisors' and Directors' Increases

Director of high-school organization—$7,000, now $6,000.

Director of music—$9,000, now $5,500.

Director of art in high schools—$6,500, now $5,500.

Director of drawing—$6,500, now $5,500.

Director of physical training, changed in new by-laws—$8,500, now $5,500.

Director of foreign languages in high schools—$7,000, now $5,500.

Director of foreign languages in junior high schools—$7,000, now $5,500.

Director of speech improvement—$4,500 to $5,500.

Director of kindergartens—$7,000, now $5,000.

Director of homemaking—$6,500, now $5,000.

Director of sewing—$6,500, now $5,000.

Inspector of ungraded classes—$7,000, now $5,000.

Assistant director of modern languages—$6,000, new.

Director of commercial subjects—$6,000, new.

Assistant administrative director—$6,500, now $5,000.

Director of civics—$7,500, new.

Director of vocational investigation, guidance, and placement—$6,000, new.

Assistant director of music, physical training, educational hygiene—$4,800 to $6,000.

Assistant director of manual training, visual instruction—$4,000 to $5,000.

Inspectors of playgrounds and recreation centers will be paid a minimum of $3,500 and a maximum of $4,500, with six annual increments of $200.

Assistant inspectors will be paid $2,500 to $3,500 with four annual increments of $250.

Teachers assigned to after-school athletics, now paid $3.25 per session, will be paid $3.75.

Division of Attendance

In conformity with existing statutes, the board has fixed the salary of the chief attendance officer as the same as that of principals of day high schools, and that of division supervising attendance officers at $5,000 to $6,000, the salary of principals in day elementary schools, and for district supervising attendance officers the salary of assistants to principals in day elementary schools.

Salaries of Attendance Officers: First year, present, $1,560; new, $1,800; second year, present, $1,690; new, $2,000; third year, $1,820; new, $2,000; fourth year, present, $1,950; new, $2,400; fifth year, present, $2,080; new, $2,600; sixth year, present, $2,210; new, $2,800; seventh year, present, $2,340; new, $3,000.

Salaries for Substitutes

Substitute teachers in elementary schools have been increased from $5.20 a day to $6 a day, and substitute teachers of shopwork from $6.50 to $7.50, and substitute teachers in high schools from $6.50 to $7.50. The increases are as follows:

From $1.95 to $2.25	From $ 6.00 to $ 6.75
From $2.60 to $3.00	From $ 6.50 to $ 7.50
From $3.25 to $3.75	From $ 7.50 to $ 8.75
From $3.90 to $4.50	From $ 8.65 to $10.00
From $4.50 to $5.20	From $ 7.80 to $ 9.00
From $4.55 to $5.25	From $ 9.10 to $10.50
From $5.20 to $6.00	From $10.45 to $12.00
From $5.50 to $6.25	From $ 9.75 to $11.25
From $5.85 to $6.50	From $12.50 to $14.00

The same rates of increase apply to per-diem teachers in evening and vacation-school service.

Vacation Schools

High schools: Supervisors, $8.80, $10; principals, $8, $9; teachers, $6, $7.50.

Junior High Schools: Principals, $600, $800; teachers, $8, $10.50; classical assistants, $5 and $6; registrars (teachers), $8, $10.50.

Protest Against Schedule

—The president of the elementary and kindergarten association of New York City has announced that a movement has been started to acquaint the public with the discrimination against the elementary teachers. The movement is the result of widespread dissatisfaction among the 16,000 teachers through the fact that they receive an increase of only $2 a week under the new salary schedules.

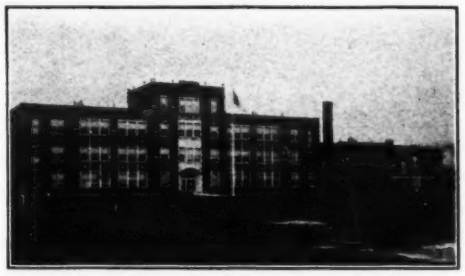
UNIVENT and Glass—*make the difference*

THE difference between the biting cold of winter winds, and temperature mild as May.

—The difference between hot, stuffy, fetid air, and air comfortably warm, and constantly freshened.

Above all others, school children need the benefits of Univent ventilation. Continuously warm air to ward off winter ills—*fresh* air to keep their growing minds alert.

The Univent—and only the Univent—is their protection. It brings in fresh, dust-free air, purifies it, heats it to a comfortable and healthful temperature, and circulates it gently and thoroughly throughout the entire room.



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In summer as well as winter, school children are assured of constantly freshened air.

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The Dunham Exhauster, operating on the jet or ejector principle, possesses the highest efficiency of any vacuum producing element practical for use in a high vacuum pump. It is in fact the only device of its kind that enables today's high vacuums to be successfully maintained. It contains no moving parts, is not subject to appreciable wear, and its efficiency is uniform under all conditions likely to be encountered in a heating system.

An Essential Requirement of Vacuum Heating

VACUUM return line systems of heating, which have been standard for a number of years, require a vacuum producing element with capacity not much in excess of ten (10) inches of vacuum. Sub-atmospheric heating, now becoming standard, has made a new demand and requires a pump capable of producing and maintaining high vacuums up to twenty (20) and twenty-five (25) inches.

The Dunham Vacuum Pump, utilizing the Dunham Exhauster or Vacuum Producing Element, meets today's needs. The high air capacity claimed for pumps of the turbine type, measured through orifice plates, does not meet these high vacuum demands because air is only a small part of the load such a vacuum pump must handle. *Condensable gases must also be handled.* The only known method by which this may be done is by drawing these gases into the water stream, thereby condensing them, thus turning a troublesome factor into a means of creating still higher vacuums.

Pumps of the turbine type, because of the very nature of the turbine principle, cannot absorb the vapors and are not capable of making use of these condensable gases.

The Dunham Exhauster, operating on the jet or ejector principle, possesses the highest efficiency of any vacum producing element practical for use in a high vacuum pump. It is in fact the only device of its kind that enables today's high vacuums to be successfully maintained. It contains no moving parts, is not subject to appreciable wear, and its efficiency is uniform under all conditions likely to be encountered in a heating system.

C. A. DUNHAM CO.

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U. S. Patent No. 1644114. Additional patents in the United States, Canada, and Foreign Countries now pending.

Over seventy branch and local sales offices in the United States, Canada and the United Kingdom bring Dunham Heating Service as close to you as your telephone. Consult your telephone directory for the address of our office in your city. An engineer will counsel with you on any project.

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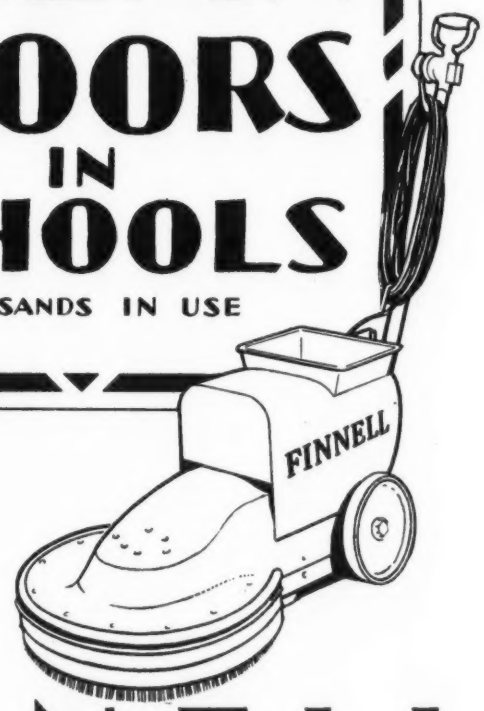
N.E.A. Convention at BOSTON Feb. 25 – March 1

And see the modern electrical way to get CLEAN FLOORS IN SCHOOLS

THOUSANDS IN USE



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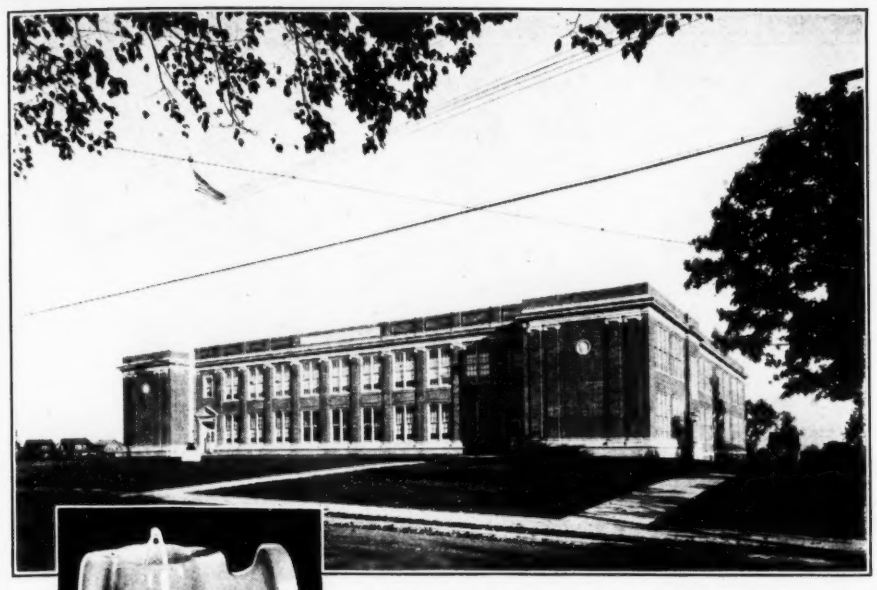
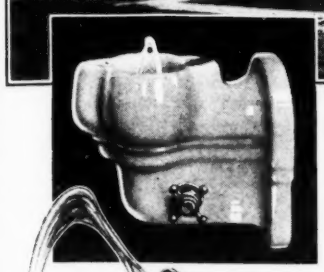


Schuyler School, Kearney, N. J. Guilbert & Betelle, Arch's. (Newark, N. J.) Halsey Taylor fountains used throughout



No. 605—Wall Type Fountain (at left)
A handsome wall type, popular with school superintendents and architects, everywhere, one of many distinctive, practical models.

Automatic Stream Control
This patented feature keeps stream at uniform height regardless of pressure variation—two stream projector makes it impractical for lips to touch source of supply.

As modern as today's school design

The old school of wood interiors and scattered windows is a thing of the past. Today's school design reflects the modern spirit of art and utility, being built to admit those factors which make for health. So it is with Halsey Taylor Drinking Fountains. In design they are modern, too! But more important—in health-safety they are unsurpassed.

Practical and Health-Safe

These up-to-the-minute fountains are side-stream types, overcoming all previous objections to such types by unique and patented principles of construction that safeguard the health of the pupils. Practical automatic stream control, two-stream projector, non-squirting! Get the facts.

The Halsey W. Taylor Co., Warren, O.

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HALSEY TAYLOR
DRINKING FOUNTAINS

Index of School-Bond Prices[1]

Harold F. Clark, Indiana University

The bond index, representing the net yield of school bonds, reached a new low level last December. In October the index stood at 4.50; during November it fell 22 points to 4.28; in December, even with some of the high issues toward the end of the year, the average for the entire month fell an additional point to 4.27.

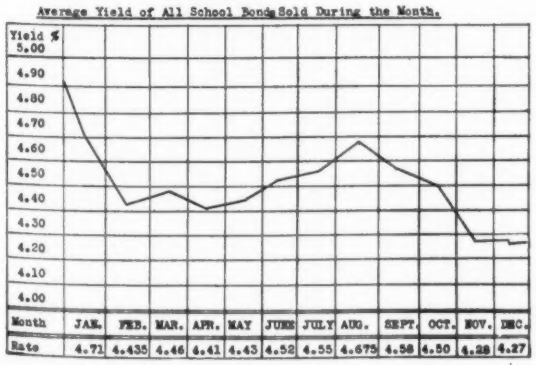
In our statement published in January, we suggested that prices of school bonds might go even higher by the last of January or the first of February. This would mean that the net yield or the interest to be paid, as represented by our index, would be even lower than the December level. This promises to be the case. The first weeks of February are almost sure to see new low levels on bond yields.

The Federal Treasury has announced its intention to begin financing for the year in the near future. It is safe to assume that the Federal Reserve Banks will do everything in their power to keep the interest rates low, at least until a major part of this financing is over. In addition, the sum of money to be invested, from dividends and investments, is very large. These factors promise low interest rates during the first quarter of 1928. This, of course, means a favorable time to sell school bonds. It is not necessary, however, to be in a hurry, for from all present signs low interest rates will continue some time into the future.

[1]Copyright, 1928, by Harold F. Clark.

TABLE I.

Average Yield of All School Bonds Sold During the Month.



Month	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
Rate	4.71	4.435	4.46	4.41	4.43	4.52	4.55	4.675	4.58	4.50	4.28	4.27

Table I.

TABLE II

	December, 1927
School bonds sold during the month[2]	$ 21,115,318
All municipal securities sold during the month	1,470,000,000
All school bonds outstanding (estimated)	2,298,000 000
Average yield of all school bonds outstanding (estimated)	4.68%
Yield of school bonds of ten large cities sold during the month	3.94%
Yield of United States long-term bonds (quotation the middle of November)	3.14%

[2]The monthly totals of school bonds do not include all the bonds issued in that month due to the difficulty of obtaining the yields on some of the issues.

The net interest rates on the school bonds sold in December varied all the way from 3.57 per cent to 6.76 per cent. Such a range does not seem to be justified by differences in the credit of the communities. The methods of selling the bonds seem to have much to do with the prices obtained. During one week in December a fourth of all the bond issues sold on a net interest base of less than 4 per cent. This should certainly furnish a chal-

TABLE IV
Average Yields of Long-Term Federal-Government Bonds[5]

Past Twelve Months Month	Rate %	Past Five Years Year	Rate %
1928		1927	3.196[6]
January	3.17[6]	1926	3.544
1927		1925	3.797
December	3.21[6]	1924	4.010
November	3.39	1923	4.298
October	3.43	1922	4.301
September	3.44		
August	3.45		
July	3.48		
June	3.47		
May	3.44		
April	3.47		
March	3.48		
February	3.58		
January	3.60		

[5]Taken from the Federal Reserve Bulletin.
[6]Calculated from the New York Stock Exchange quotations and not the final Federal Reserve Board average.

TABLE V
Security Prices[7]

Date	Average Price of 228 Stocks	Average Price of 40 Bonds
1928		
January	197.[8]	99.9[8]
1927		
December	196.5	97.6[8]
November	189.	99.7
October	186.2	99.6
September	191.1	98.00
August	179.3	97.76
July	171.7	97.03
June	168.5	97.06
May	167.5	97.55
April	166.2	97.24
March	159.0	96.63
February	156.9	96.44
January	153.5	96.43

[7]As reported by the Standard Statistics Company, Inc. Used by special permission.
[8]Not final.

TABLE III
Bond Sales[3]

Year	School	Municipal	All Public and Private
1927	.....	$1,450,000,000[4]	$7,000,000,000[4]
1926	260,000,000	1,365,000,000	6,311,000 000
1925	323,000,000	1,399,000,000	6,223,000,000
1924	288,000,000	1,398,000,000	5,593,000,000
1923	208,000,000	1,063,000,000	4,303,000,000
1922	237,000,000	1,101,000,000	4,313,000,000
1921	215,000,000	1,208,000,000	3,576,000,000
1920	130,000,000	683,000,000	3,634,000,000
1919	103,000,000	691,000,000	3,588,000,000
1918	41,000,000	296 000,000	14,368,000,000
1917	60,000,000	451,000,000	9,984,000,000
1916	70,000,000	457,000,000	5,032,000,000
1915	81,000,000	498,000,000	5,275,000,000
1910	42,000,000	320,000,000	2,400,000,000

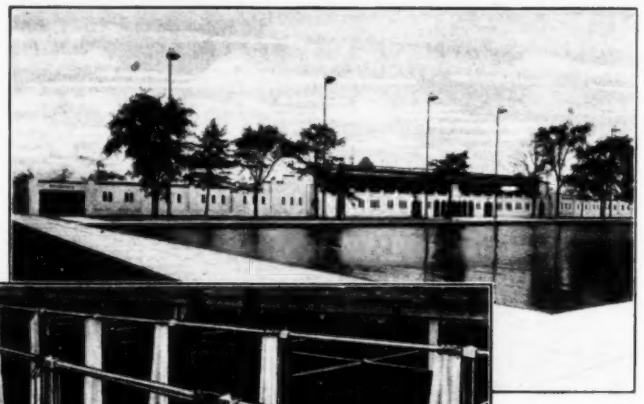
Average Rate at Which Bonds Were Sold

Year	Municipal
1927	....
1926	4.61
1925	4.58
1924	4.26
1923	4.76
1922	4.81
1921	5.18
1920	5.12
1919	5.04
1918	4.90
1917	4.58
1916	4.18
1915	4.58
1910	4.38

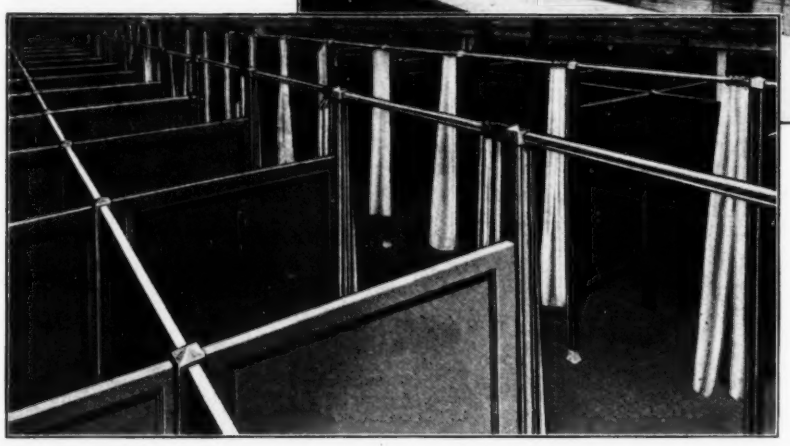
[3]By special permission based upon sales reported by the Commercial and Financial Chronicle.
[4]Not final.

Craftsmanship in Metal

PARTITION BUILDERS SINCE 1915



Herman Kregelius, *Architect*



For this Immense Outdoor Pool

FOR the new Woodland Hills Bath House in Cleveland—possessing one of the largest municipal pools in the world—Sanymetal Dressing Room Partitions were naturally chosen, as representing the last word in sanitation, durability, and economy.

These same features make Sanymetal Partitions a wise investment for ***your*** school dressing rooms, offices, or toilet rooms.

Sanymetal Products for Schools are: Toilet, shower, dressing and urinal compartments. Corridor and smoke screens. Metal doors and wainscot. Sanymetal Gravity Hinges. Write for New Catalog No. 30.

THE SANYMETAL PRODUCTS CO.
1703 Urbana Road - Cleveland, O.

For Schools **Sanymetal** T.M.Reg. **Toilet and Shower PARTITIONS**

TABLE VI

Revised Index Number of Wholesale Prices[9]

Month 1928	All Commodities	Building Materials	Year	All Commodities	Building Materials
Jan.	95.2[10]	90.[10]	1927	.....	.....
1927			1926	100.	100.
Dec.	96.1[10]	90.[10]	1925	103.5	101.7
Nov.	96.7	90.2	1924	98.1	102.3
Oct.	97.0	91.6	1923	100.6	108.7
Sept.	96.5	92.1			
Aug.	95.2	92.9			
July	94.1	93.7			
June	93.8	94.6			
May	93.7	95.1			
April	93.7	95.0			
March	94.5	95.3			
Feb.	95.9	96.2			
Jan.	96.6	97.5			

[9]United States Bureau of Labor Statistics, 1926=100.
[10]Not final.

lenge to any community to sell its bonds on less than a 4-per-cent basis.

Final figures are not ready, but it now looks as though the total sales of all state and municipal bonds made a new high record in 1927. The final tabulation for the year may show a total as high as $1,450,000,000. All new securities sold, including both public and private were over $7,000,000,000.

IMPORTANT SCHOOL-BOND SALES FOR THE MONTH OF DECEMBER

Delaware—Oak Grove, School District No. 130	$ 1,000,000
Louisiana—Orleans Par., School District	2,000,000
Massachusetts—Medford, School	250,000
Massachusetts—Medford, School	700,000
Nebraska—Omaha, School District	650,000
Nebraska—Omaha, School District	1,000,000
New Jersey—Belleville, School District	417,000
New Jersey—Newark, School	1,055,000
New Jersey—Overpeck twp., School District	353,000
New Jersey—Teaneck twp., School District	723,000
New Jersey—West New York, School	710,000
New York—Hempstead, Union Free School District 22	600,000
New York—New Rochelle, School	615,000
New York—New York, School Construction	950,000
New York—Orangetown, Union Free School District No. 4	650,000
New York—Rochester, School Revenue	900,000
New York—Syracuse, School	380,000
North Carolina—Greater Greensboro School District	1,000,000
North Carolina—Guilford Co., School Building	500,000
Ohio—Cleveland, City School District	2,000,000
Ohio—Columbus, City School District	1,150,000
Ohio—Cuyahoga Falls, School District	350,000
Ohio—Oakwood, School District	324,000
Pennsylvania—Cheltenham twp., School District	580,000
Pennsylvania—Lock Haven, School District	300,000
Pennsylvania—Wilkinsburg, School District	400,000

SCHOOL-BUILDING PROGRAMS IN 186 CITIES
(25,000 Population and Upward)

STATE	Buildings Under Construction	Buildings Proposed
Alabama	$ 16,000	$ 30,000
Arizona	107,000	100,000
Arkansas	47,500	535,000
California	9,200,684	5,465,500
Colorado	878,284	260,000
Connecticut	57,100	535,000
Delaware	1,000,000	1,575,000
District of Columbia	3,350,000	1,477,000
Florida	798,000	160,000
Georgia	.....	2,066,100
Illinois	21,791,000	70,050,000
Indiana	200,000	1,072,000
Iowa	2,160,000	.....
Kansas	160,000	250,000
Kentucky	950,000	.....
Maine	375,000	.....
Maryland	2,349,545	10 000,000
Massachusetts	3,348,592	3,500,000
Michigan	3 112,816	.....
Minnesota	755,000	1,000,000
Missouri	1 450,814	80,000
Nebraska	920,000	300,000
New Hampshire	.....	.....
New Jersey	4.395,000	1,375,000
New York	30.414,811	41,989,600
North Carolina	.....	.....
Ohio	7,696.900	9,717,000
Oklahoma	125,000	1,294,000
Oregon	1.325,000	1.400,000
Pennsylvania	14.641,909	16,755 000
Rhode Island	750,000	3,000,000
South Carolina	.....	.....
Tennessee	430,000	1,000 000
Texas	3,340,000	3,230,000
Utah	95,000	100,000
Virginia	.....	825,000
Washington	2 430.000	1,566,000
West Virginia	100 000	250,000
Wisconsin	5,109,000	2,665,000
	$23,889 955	$83,622,200

SCHOOL-BUILDING OPERATIONS IN 37 OF THE LARGEST CITIES

CITY	Buildings Under Construction	Buildings Proposed
New York City, N. Y.	$21,878,295	$31,108,000
Chicago, Ill.	19,000,000	69,000,000
Philadelphia, Pa.	9,070,000	11,800,000
Cleveland, Ohio	1,900,000	6,010,000
St. Louis, Mo.	600,000	.....
Baltimore, Md.	2,349,545	10,000,000
Los Angeles, Calif.	1,961,136	919,000
Buffalo, N. Y.	3,046,516	5,091,600
San Francisco, Calif.	2,840,000	1,725,000
Milwaukee, Wis.	2,775,000	2,415,000
Washington, D. C.	3,350,000	1,477,000
Minneapolis, Minn.	505,000	1,000,000
Kansas City, Mo.	315 814	.....
Seattle, Wash.	1,820,000	1,516 000
Portland, Oreg.	1,325,000	1,400,000
Denver, Colo.	528,284	260,000
Toledo, Ohio	1,426,000	2,185,000
Providence, R. I.	750,000	3,000,000
St. Paul, Minn.	250,000	.....
Oakland, Calif.	1,950,998	1,991,500
Atlanta, Ga.	.....	2,054,100
Worcester, Mass.	.....	850,000
Syracuse, N. Y.	1,525,000	900,000
San Antonio, Tex.	.....	1,500,000
Dayton, Ohio	1,140,000	.....
Houston, Tex.	.....	400,000
Scranton, Pa.	452.472	.....
Grand Rapids, Mich.	300,000	.....
Paterson, N. J.	500,000	625 000
Fall River, Mass.	220,000	1,000,000
Albany, N. Y.	1,500,000	.....
Wilmington, Dela.	1,000.000	1,575,000
Spokane, Wash.	475,000	.....
Erie, Pa.	140,000	1,300,000
Flint, Mich.	1,575,000	.....
Oklahoma City, Okla.	125,000	1,294,000
Schenectady, N. Y.	.....	1,100,000
	$86,594,060	$63,496,200

THE NORTHMONT SCHOOL

Frederick A. Muhlenberg, Architect, Reading, Pa.

(Continued from Page 66)

The kindergarten room occupies the stage. Under the stage are located separate locker and shower rooms for boys and girls. A fine motion-picture booth occupies the gallery over the rear end of the gymnasium.

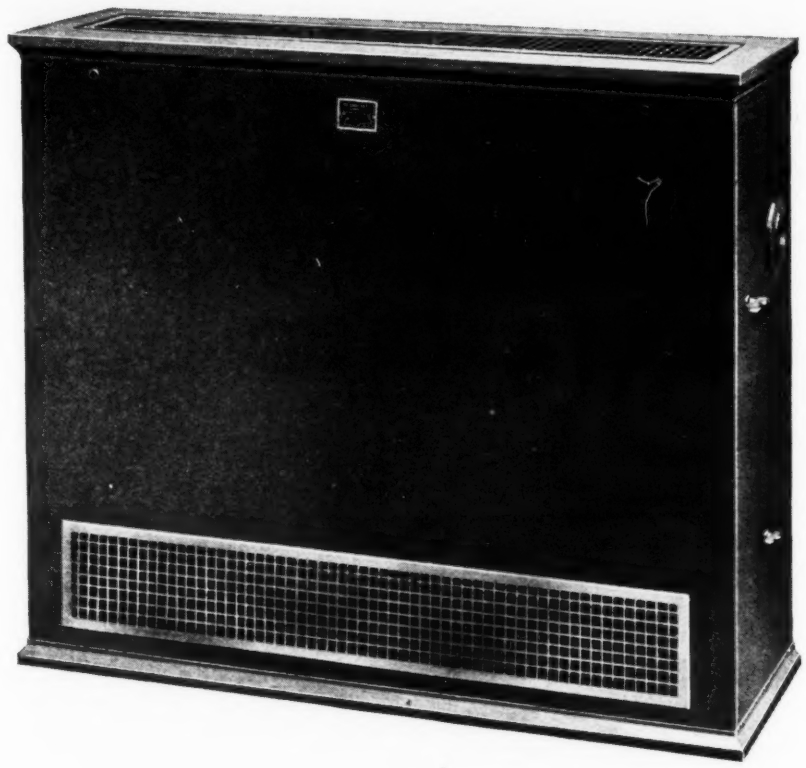
THE READING SENIOR HIGH SCHOOL

Messrs. Ritcher & Eiler, Architects, Reading, Pa.

As indicated above, the architects of the Reading High School, Messrs. Ritcher & Eiler, were fortunate in the site selected by the board. The building, while not a low type, has been executed in such a way as to nestle into the mountain slope

(Concluded on Page 126)

Let the American Blower Engineer Explain the Many Benefits of Universal Heating and Ventilating Units to You



UNIVERSAL HEATING AND VENTILATING UNITS

In schools like the Roland Park School, Baltimore, Md. (Edward L. Palmer, Architect; H. G. Perring, Supervising Engineer) you'll invariably find Universal Heating and Ventilating Units.

"Why can't we keep an even temperature in our rooms?" asks the school official.

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What is the trouble?

Is your heating and ventilating system functioning properly?

Is it modern in every respect?

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Universal Heating and Ventilating Units sold by the American Blower Corporation have been properly heating and ventilating public schools for over 15 years. They are quiet in operation, simple in design, highly efficient, dependable from every angle and economical.

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BRANCH OFFICES IN ALL PRINCIPAL CITIES

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PLATE 4756 N

pressure tank closet with vitreous china juvenile height (14 inches) syphon jet bowl with extended front lip. Patent Automatic seat operating valve, galvanized iron pressure tank with bracket shelf and brass flush pipe with holder and double rubber bumper. All exposed brass trimmings heavily nickel plated.

For Durability

Endurance is an inherent characteristic of "NONCO" Plumbing Fixtures.

They are carefully designed and their sturdiness in construction covers years of continuous service.

Every "NONCO" Fixture reflects in every detail, beauty, utility, and durability, covering efficiency in economy and operation and absolute satisfaction in use.

Our experts are always at your service and will be glad to offer any suggestions on any and all your plumbing problems.

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Los Angeles, Calif. Salt Lake City, Utah Dallas, Tex.
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Jackson, Tenn.

PIONEER MANUFACTURERS OF PLUMBING FIXTURES FOR SCHOOLS

(Concluded from Page 124)

and to set off the details of the Gothic tower and other Gothic elements of the exterior. The building has been erected so that its main axis faces Douglas Street, which gives a clear vision across the city. The position on the lot, as well as the general arrangements of the plan, provides an east or west exposure for the greatest number of classrooms. The building is rectangular in plan and contains about 110 rooms, exclusive of the auditorium and minor service rooms.

The wide terrace and the stairways which lead to it add considerably to the dignity of the central tower. Their main purpose is not to ornament the building but rather to provide space for a small auditorium or music room which will seat 500 persons, and will afford a community meeting place independent of the balance of the building.

The exterior of the building is of buff rough-texture brick trim, with Indiana limestone trimming. The construction in general is reinforced concrete and structural steel, with partitions of nonbearing clay and gypsum tile.

The general plan of the building is such that circulation between classes and the main assembly places, particularly the auditorium and the cafeteria, are facilitated.

The corridors are 12 ft. wide in the clear and travel from floor to floor is cared for by means of eight main stairways, all of concrete and located in fireproof stair walls. There are also two elevators, one for passengers and one for freight. Lockers are built into the corridor walls and steel wainscoting is used so that the corridors may give a maximum of service.

The auditorium is seated to accommodate 1,700 persons and is equipped with a motion-picture booth, a complete stage, and dressing rooms. The room has large windows for daylight use and ventilation. The walls and ceilings are finished with morene cement in imitation of travertine, which has the added merit of improving the acoustical efficiency.

The ground floor contains the shops, the heating apparatus, the toilets, and a small auditorium. The first floor contains the administrative offices and a series of classrooms and laboratories. The second floor contains a large library, classrooms, laboratories, and workrooms. A health-service department is also on this floor. The top floor is devoted to classrooms, laboratories, and various other rooms, including the cafeteria. This room has a seating capacity of 600 and is beautifully lighted with windows as well as skylights.

The total cost for the building was $1,290,395. The general contract amounted to $1,026,000; the heating and ventilation, $155,000; the plumbing, $62,485; the electrical work, $46,900. The building contains 3,500,000 cu. ft., and cost $0.37 per cu. ft.

THE SOUTHERN JUNIOR HIGH SCHOOL, READING, PA.

Scholl & Richardson, Architects, Reading, Pa.

The Southern Junior High School building provides facilities for the older and most closely built-up section of the city. The site is located in the very center of population of the school's territory and has a frontage of 230 ft. and a depth of 183 ft.

The plan adopted for the building, with the central portion of the front or south façade recessed, was determined upon for several reasons. First, it provides the minimum number of classrooms facing the more intense southern light; second, the strong shadows of the projecting pylons and the front terrace produce a most desirable effect as a terminal for the oblique street and at the same time accomplishes a greater retirement of the front façade from the Chestnut Street side; third, the front terrace scheme affords free space for the three main entrances to the building, and offers a greater area of exterior lighting, at the same time permitting the peculiar arrangement of the large gymnasium below, with overhead southern sunlight.

The architectural style of the building is a rather free Italian design. The exterior is carried out in golden rough-texture brick, with terra-cotta trimming. The windows in each of the three stories are arranged in units with continuous mullions, providing a vertical effect far more pleasing than the regular separated window groups. The panels between the different stories are modeled with a background of a deeper color, and the center panel of each background pierced, thus affording direct outside air for the mechanical units in each room.

The building has been planned to accommodate 1,500 students, and contains 41 class and recitation rooms, 1 clerical room, a principal's office, a medical room, 3 faculty rooms, 2 libraries, 2 drawing rooms, a music room, 2 gymnasiums, an auditorium, 5 shops, and a cafeteria.

Among the outstanding features of the building are the boys' gymnasium, which provides space for spectators on the four sides of the room without interfering with the play space, and the cafeteria, which is of sufficient size to provide excellent accommodations for all occasions and adequate light and ventilation. There is a separate dining room for the use of the faculty. The drawing and art-rooms are well located with adequate north light. The music room is 66 ft. long, has a sloping floor and barreled ceiling, a stage, instrument rooms, and is arranged to eliminate all disturbing sounds from the rest of the building.

The ground floor is devoted entirely to the various shops for boys' work. The domestic-arts suite consisting of five units, is located on the third floor.

The auditorium is centrally located, with full circulating exits on both the first and second floors. The balcony is arranged with full cantilever construction, and the stage affords space for dressing rooms and a pipe organ.

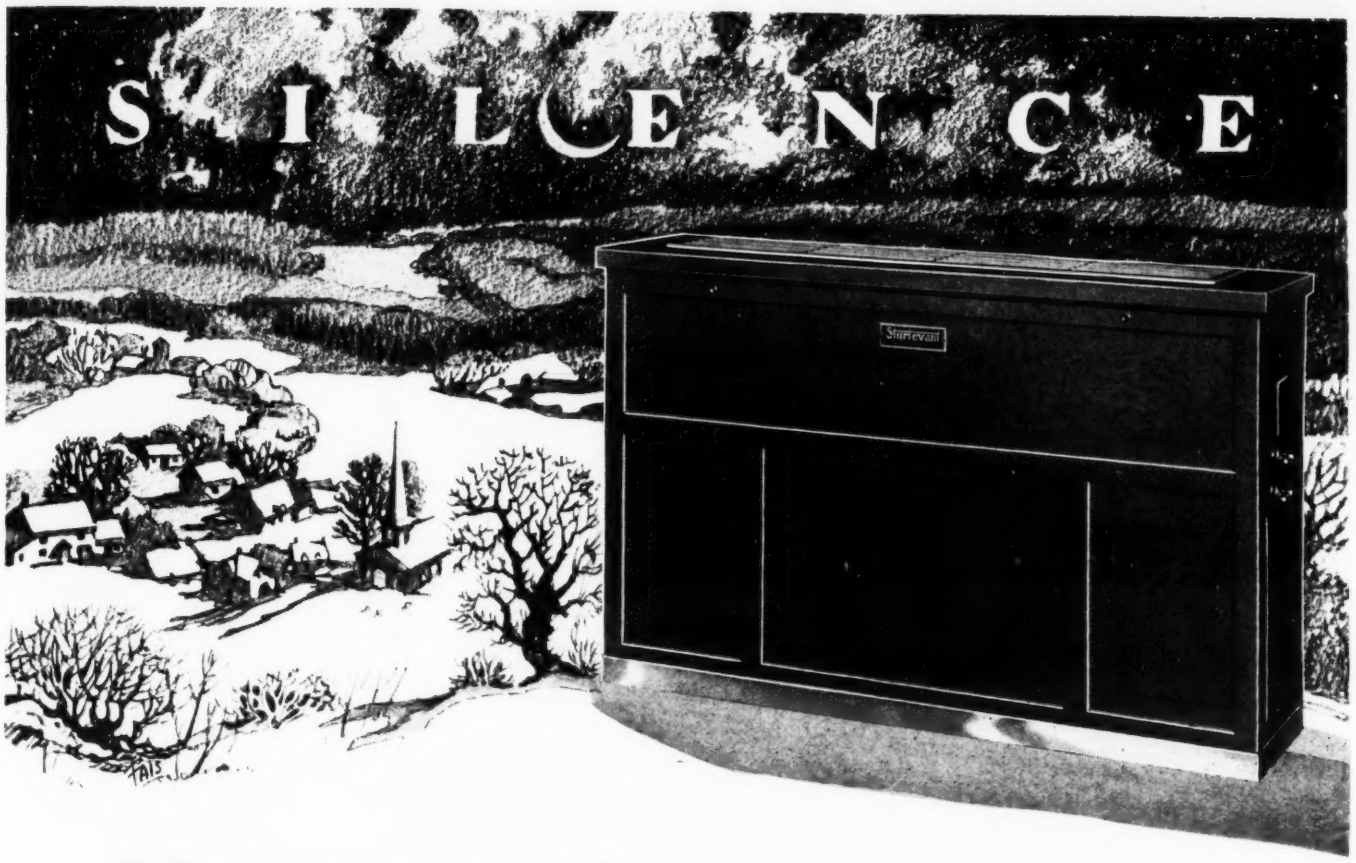
The building is entirely fireproof and the parapet walls extend 8 ft. above the flat concrete roof, providing a space 33 by 170 ft. for boys' and girls' playing courts. The plumbing, electrical equipment and mechanical apparatus are the most modern in character. A large elevator has been installed for passenger service to the various floors, including the cafeteria.

THE OKLAHOMA CITY SCHOOL-BOND ISSUE

The citizens of Oklahoma City, on November 29, approved a bond issue of $1,700,000 for school purposes.

The bond issue will provide for a new senior high school, to be erected at a cost of $500,000. In addition to the senior high school to be erected, eleven school sites will be purchased at a total cost of $127,500, and additions to existing structures at a cost of $150,000.

It is expected that a total of 40 rooms will be added to various elementary-school buildings. It is planned to erect eight-room units of future large schools on sites of four new elementary schools.



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from the "Silent" Sturtevant to disturb the quiet schoolroom

The "Silent" Sturtevant fits unobtrusively into the quiet atmosphere of the schoolroom, church, or office.

No disturbing sound comes from the attractive metal cabinet to betray the fact that fan and motor are at work supplying healthful, fresh air. A well-ventilated room, alone, testifies to their efficient operation.

Silence is attained in the new "Silent" Sturtevant Unit Ventilator by making the fan wheels fifty per cent larger in diameter than those used in other unit ventilators of the same rating. Consequently, the fan can be run very slowly, and the air moves noiselessly at a low velocity. A saving in electric power is another advantage gained through using a slow speed fan.

Silent Unit ventilation is an exclusive Sturtevant attainment. Our nearest office will gladly send you a copy of Bulletin No. 344-A which gives complete information about the "Silent" Sturtevant.

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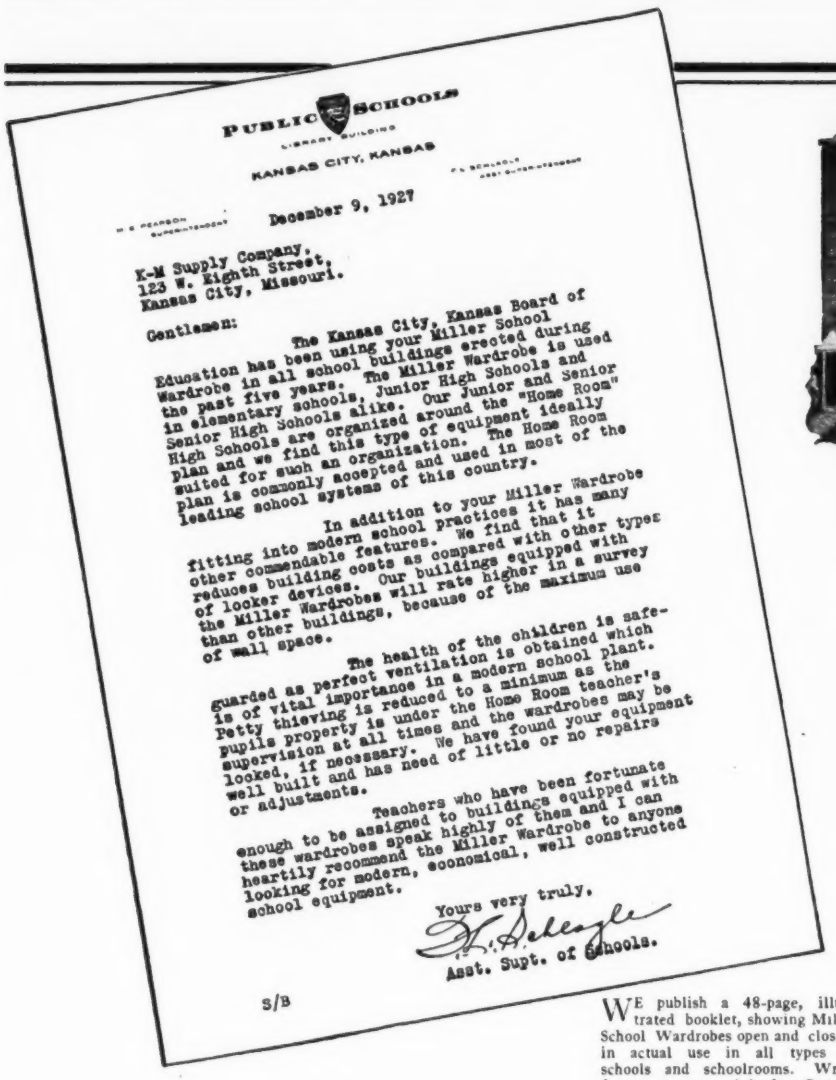


PUBLIC SCHOOLS
LIBRARY BUILDING
KANSAS CITY, KANSAS

December 9, 1927

K-M Supply Company,
123 W. Eighth Street,
Kansas City, Missouri.

Gentlemen:

The Kansas City, Kansas Board of Education has been using your Miller School Wardrobe in all school buildings erected during the past five years. The Miller Wardrobe is used in elementary schools, Junior High Schools and Senior High Schools alike. Our Junior and Senior High Schools are organized around the "Home Room" plan and we find this type of equipment ideally suited for such an organization. The Home Room plan is commonly accepted and used in most of the leading school systems of this country.

In addition to your Miller Wardrobe fitting into modern school practices it has many other commendable features. We find that it reduces building costs as compared with other types of locker devices. Our buildings equipped with the Miller Wardrobes will rate higher in a survey than other buildings, because of the maximum use of wall space.

The health of the children is safeguarded as perfect ventilation is obtained which is of vital importance in a modern school plant. Petty thieving is reduced to a minimum as the pupils property is under the Home Room teacher's supervision at all times and the wardrobes may be looked, if necessary. We have found your equipment well built and has need of little or no repairs or adjustments.

Teachers who have been fortunate enough to be assigned to buildings equipped with these wardrobes speak highly of them and I can heartily recommend the Miller Wardrobe to anyone looking for modern, economical, well constructed school equipment.

Yours very truly,
F. L. Schlagle
Asst. Supt. of Schools.

S/B

What Kansas City, Kansas Says About Miller Wardrobes

Acknowledge as one of the best public school systems in the United States, the use made of Miller School Wardrobes by the Kansas City, Kansas, school system becomes more than significant—it is evidence that a school system cannot be truly *modern* without this equipment. Read the letter of F. L. Schlagle, Asst. Supt. of the Kansas City, Kansas, schools. Note that for *five years* every new school building constructed there has been equipped with Miller Wardrobes. Note that teachers assigned to these buildings consider themselves "fortunate." Consider the value of perfect ventilation, maximum use of wall space, elimination of petty thieving—and the economy in building cost and upkeep. Ask yourself whether you would not like to have this equipment as a part of your school system! It is now used successfully in 432 cities.

WE publish a 48-page, illustrated booklet, showing Miller School Wardrobes open and closed, in actual use in all types of schools and schoolrooms. Write for your copy. Ask for Catalog W-6. See address below.

K-M SUPPLY CO.

123 West 8th St., Kansas City, Missouri

SCHOOL BUILDING NEWS

—Nyack, N. Y. Construction work has begun on a junior-senior high school, to cost $650,000. The building will be located on a nine-and-one-half acre site facing the state highway and overlooking the Hudson Valley. Mr. Ernest Sibley, Palisade, N. J., is the architect of the building.

—The negroes of Summerville, Ga., with the aid of the board of education, recently purchased the Taylor Institute, which has been remodeled and placed in condition for school purposes. The money for the building was raised by public subscription. A second negro school has been erected at Holland, in Chattanooga county, Ga. This building was erected with the aid of the county board of education and the Julius Rosenwald Fund.

—What is considered the first step toward the reorganization of the Bureau of Construction and Maintenance of the New York City schools, has been taken by President George J. Ryan, with the dropping from the payroll of William E. Lutjens, chief general inspector of the bureau.

—The school board of Mankato, Minn., has sold the second $200,000 of the $400,000 bond issue voted recently by the citizens of the town. The proceeds of the bond issue will be used for the erection of two new buildings. The first building will be occupied in January, and the second in September, 1928.

—Oklahoma City, Okla. A bond issue ranging between $1,750,000 and $2,000,000 will be required to meet the needs of the proposed school-building program. The program calls for a new senior high school and sites for three junior high schools.

—Middletown, Ohio. The school board has completed a survey of the school plant as a means of obtaining information on population increases and additional school facilities.

—Owosso, Mich. The school board has employed an architect to prepare plans for a new school building. An election will be called to vote the necessary bonds for the building.

—Pontiac, Mich. The citizens voted in November on a bond issue of $1,965,000 for an expansion of the school plant. Additional housing facilities are needed to overcome the present crowded conditions in the schools.

—Springfield, Mo. A bond issue of $1,747,500 for a building program to met the needs of the schools has been proposed by Mr. Charles A. Smith, architect of the board of education. The program which will cover the present needs of the schools and the probable growth of the next three years, is intended to bring the school plant up to modern standards without eliminating any structures which can be economically remodeled or relocated.

—Lakeview, Ohio. Three citizens of Stokes township have asked the Common Pleas Court for an injunction to prevent the township board from certifying a $110,000 bond-issue vote for a new school. The injunction charges fraud in the conduct of the election balloting.

—Atchison, Kans. Supt. T. B. Portwood, in a recent report, gives facts and figures showing that the board has consistently endeavored to reduce the amount of the bonded indebtedness of the school district. A program of economy and wise expenditure of school funds has made it possible for the board to cancel a certain amount of bonds each year until the amount canceled has increased to seven times the amount of five years ago.

The report shows that in 1923 the board canceled $5,000 in bonds; in 1924, $9,000; in 1925, $5,000; in 1926, $21,000; in 1927, $31,000, and in 1928, $36,000. The general fund covering the four years from 1924 to 1928 has decreased from $158,000 in 1922 to $153,000 in 1927.

—Akron, Ohio. Mr. Harold McGee recently presented to the board his report on the survey of the school population. The survey was made to indicate the present growth of the school population and the prospective growth of the next few years as a basis for the location of new school buildings. The report covered 75 pages and was illustrated with numerous maps and charts pertaining to important points in the survey.

—Kirtland, Ohio. The school board has taken steps toward the inauguration of a school-building program. A bond issue of $95,000 was recently approved for this purpose.

—Akron, Ohio. School buildings costing in excess of $635,000 have been planned by the boards of education in Summit and adjoining counties. The schools will be located in Manchester, Northampton, Northfield, Clinton, Kenmore, and Greentown.

—Pittsburg, Kans. A short course for janitors and engineers was held December 12-16, at the Pittsburg Teachers' College, in cooperation with the state board of education. Among the subjects taken as a part of the course were mops and mopping, cleaning of terrazzo floors, cleaning and oiling floors, firing coal, blackboard and eraser cleaning, and relation of the janitor to public health.

—Virginia, Minn. A survey of school-building needs was recently undertaken by a group of five officials of the state education department, under the direction of Mr. Samuel A. Challman, director of buildings and sanitation of the state department. The purpose of the survey is to obtain data to be used in the erection of a new junior high school.

—Springfield, Mo. President G. G. Lydy of the board of education has announced that two bonding proposals will be submitted to the citizens in January. The propositions call for a bond issue of $100,000 for playgrounds and athletic field and another bond issue of $260,000 for school-building improvements.

—Bellingham, Wash. The citizens have been asked to approve a bond issue for a new school and a gymnasium.

—Belleville, Ill. The citizens recently approved a bond issue of $275,000 for the erection of a new school and for the rebuilding of three existing buildings.

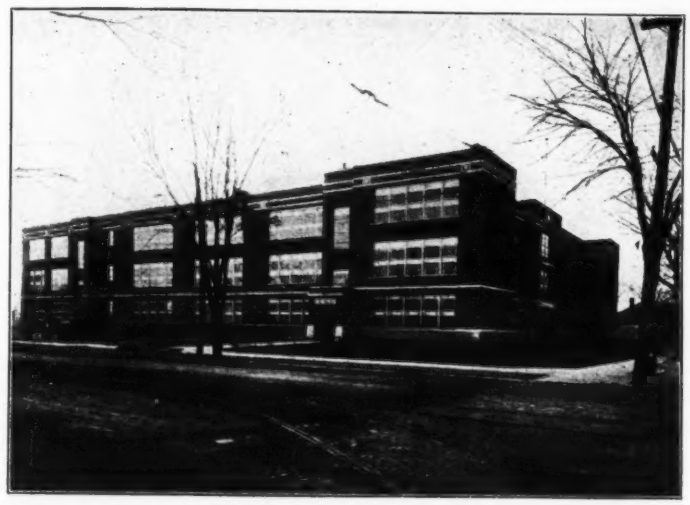
—Alton, Ill. A senior high school has been completed, at a cost of $750,000.

—The Jefferson School at Muscatine, Iowa, was dedicated on December 2, with appropriate ceremonies. The building which is two stories high, has a capacity of 906,100 cubic feet, and cost $221,833. The building which has been erected to meet the needs of the district for many years, is a model in every respect and represents the first unit in an extensive building program for the

(Concluded on Page 131)

RESULTS COUNT MORE

BINGHAMTON N. Y.
ADOPTS
HEATOVENTS
FOR ITS THIRD NEW HIGH SCHOOL BLDG.



Christopher Columbus School erected in 1926 was equipped with forty-seven (47) Buckeye Heatovents.

Architects

TIFFANY & KALEY, Binghamton, N. Y.

Heating Contractor

GAYLORD & EITAPENC, Binghamton, N. Y.

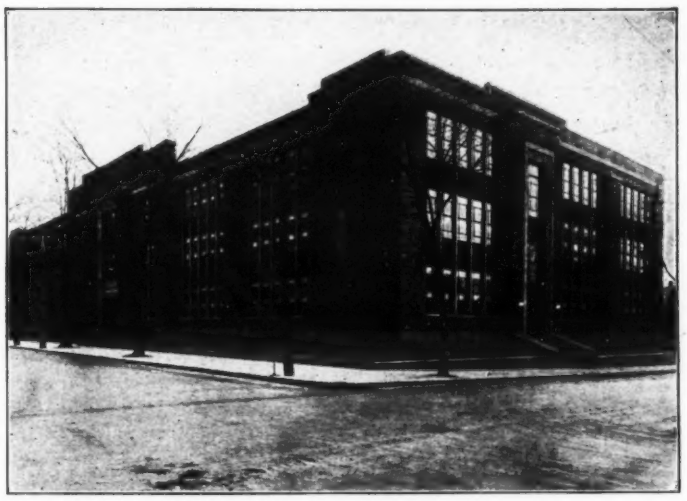
East Junior High School erected in 1925 was equipped with forty-nine (49) Buckeye Heatovents.

Architects

T. I. LACEY & SONS, Binghamton, N. Y.

Heating Contractor

M. E. Lewis, Binghamton, N. Y.



BENJAMIN FRANKLIN School now under construction will be equipped with Forty-nine (49) Buckeye Heatovents. Heating Contract let to Gaylord & Eitapenc, Binghamton, N. Y. Architects, Conrad & Cummins, Binghamton, N. Y. (photo not yet available).

Results from previous installations are the best recommendations for the use of Buckeye Heatovents, the modern, self-contained Unit Heating and Ventilating System.

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Chicago, Ill., 401 Transportation Bldg.
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Denver, Colo., 1226 California St.
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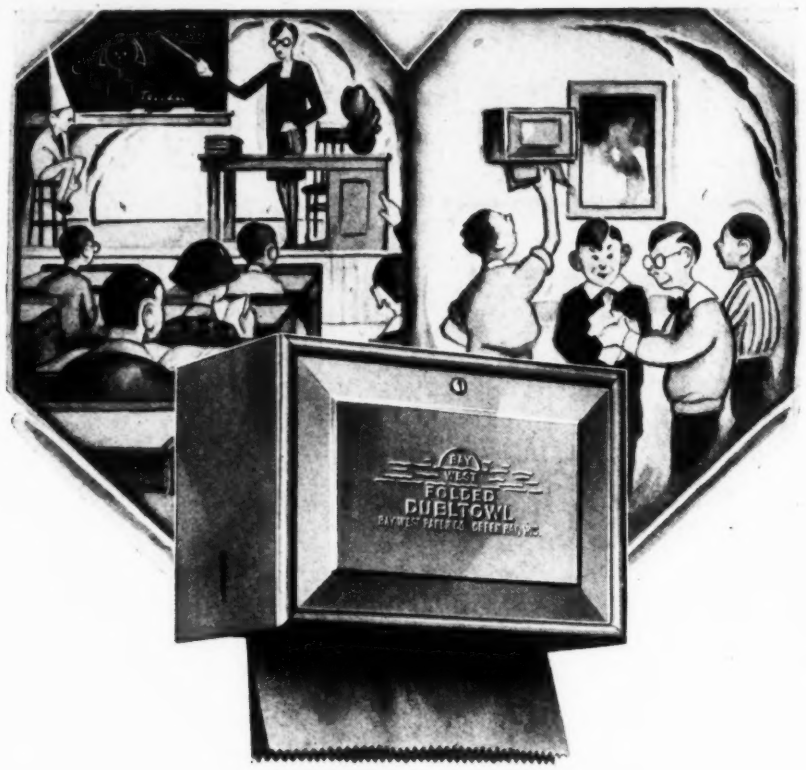
Indianapolis, Ind., 3115 N. Central Ave.
Kansas City, Mo., 1101 Pioneer Trust Bldg.
Los Angeles, California, 1824 S. Hope St.
Milwaukee, Wis., 409 Loan & Trust Bldg.
Minneapolis, Minn., 416 Essex Bldg.
New York City, 1400 Broadway.
Newark, N. J., 403 Military Park Bldg.
Pittsburgh, Pa., 789 Columbia Bank Bldg.
Portland, Ore., Security Bldg.
Salt Lake City, U., 402 Scott Bldg.
San Francisco, Calif., 746 Sansome St.
Syracuse, N. Y., 324 Union Bldg.
Toronto, Canada, 21 River St.
Youngstown, Ohio, 1101 Realty Bldg.



Dubltowls Teach Economy by Example

Dubltowl service not only saves money but keeps before the children a constant and vivid example of economy. The careless child quickly learns that *one Dubltowl wipes dry*. The idea of waste is completely discouraged.

Dubltowls do not grate or scratch. The only chemical content, the natural resin, is pleasant and beneficial to the skin. Excellent for facial use; leaves no fuzz or lint. Will not break easily or crumble when moistened—every inch may be used, assuring further economy.

400 leading schools are using Dubltowls. Take advantage of our *free trial offer*. It will help keep your building supply budget down.

Dispensed from neat Dubltowl cabinet or your present standard equipment. 10x10¾ inch sheets. 150 Dubltowls (300 sheets) to the package. 25 packages to the carton.

BAY WEST DUBLTOWLS

"ONE DUBLTOWL WIPES DRY-TRY IT"

FREE TRIAL OFFER

A Dubltowl dispensing cabinet and 4 packages of Dubltowls for free trial will be sent on request. Mail the coupon.

BAY WEST PAPER CO.,
Green Bay, Wis.

Send me your dispensing cabinet with 4 packages of Dubltowls for free trial. It is understood that no obligation is involved and that carrying charges will be prepaid.

A Bay West Wash-Up Kit (combination of Dubltowls and soap sheets) to fit door pocket of car will be included.

Name .....

Address .....

School .....

Is Quantity of SOAP SOLIDS all that counts?

NO! And yet many people believe it. But consider the two bars of soap illustrated above. The large bar of laundry soap costs 5c. The small bar of toilet soap costs 10c. For one-fourth the quantity of soap, you willingly pay twice as much. Why? Because the quality of the toilet soap is much better suited for use on the human skin than the laundry soap which is strongly alkaline and made with the cheapest ingredients. Don't be satisfied merely to know the percentage of soap solids for . . . .

Quality Counts too!

How the soap is made and whether the soap solids are made from the finest ingredients has much to do with your satisfaction in the use of a liquid toilet soap. In Liqua-San the soap content is guaranteed in writing on every container, but *your best guarantee* is the laboratory method of manufacture from the finest obtainable ingredients which assures that *soothing quality, rich lather* and *quick cleansing properties.*

Write today for more information about

LIQUA-SAN
The Liquid Soap
FROM HUNTINGTON LABORATORIES

The Huntington Laboratories
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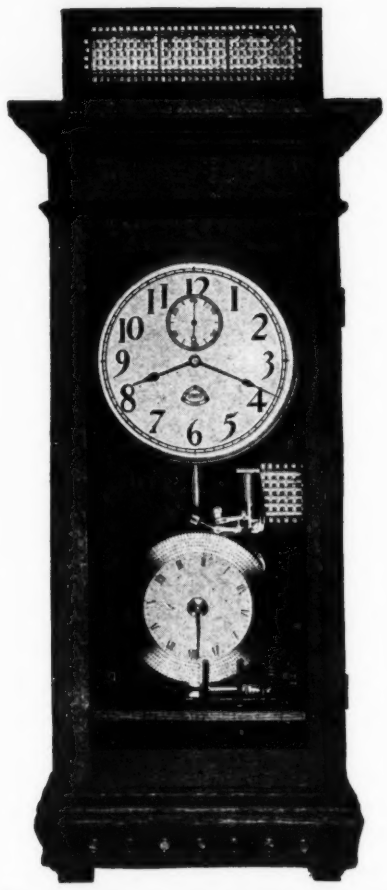
Huntington, Indiana



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Our Aim For Nearly Half Century
TO SUPPLY
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RECOGNIZED BY ELECTRICAL AND MECHANICAL ENGINEERS THROUGHOUT THE COUNTRY AS THE HIGHEST QUALITY, SIMPLEST AND MOST ECONOMICAL EQUIPMENT PRODUCED.

One Quality—One Price—One Policy

The Landis Engineering & Mfg. Co.
WAYNESBORO, PENNA.

(Concluded from Page 128)

future. The building was erected from plans prepared by Dougher, Rich and Woodburn of Des Moines, with the Hunzinger Company of Davenport as general contractors.

—The voters of Waterville, Kans., on December 12, approved a bond issue of $40,000 for an addition to the present high-school building. The addition will house the laboratories, the heating plant, and will provide for the enlargement of the auditorium and a gymnasium.

—The board of education of Sacramento, Calif., has taken steps toward calling a bond-issue election early this year.

—The Detroit board of education has voted down the mayor's veto on the proposed teachers' college The board has decided to set aside $610,000 for the purpose named. The construction is to be delayed until the board is in a better financial condition.

—New York, N. Y. The board of education has adopted a building program for 1928 calling for an expenditure of $36,487,000 for 8 secondary schools, and 27 elementary schools. The total cost of the elementary schools will be $19,629,000, and of the high schools and special schools, $12,533,000. It has been announced that all plans for new buildings will be dependent upon the reports of the building investigation which has been under way for some time.

—Chicago, Ill. A saving of $419,000 to taxpayers and a prospective saving of $5,000,000 in the building program of 1928 has been announced by Mr. J. Lewis Coath, president of the board of education. Under the plan of arranging the building program four or five months in advance, the board will be able to build now when the builders need the work. At present two staffs of architects are at work planning the $54,000,000 building program.

—A survey of school buildings will be made at Springfield, Ill., in order to determine the actual need for further protection of children against fire hazards. According to the chief of the fire prevention bureau, 97 per cent of the loss of life in fires is due to panic.

—Columbus, Ohio. The school board has rented additional classroom space in order to relieve the congestion in several schools. The board will shortly begin condemnation proceedings for playground purposes.

—Chicago, Ill. The school board has been asked to name the new Flower High School for girls after the designer of the American flag, Betsy Ross.

—Springfield, Mo. The citizens have been asked to approve a proposition asking for $100,000 for playgrounds and $260,000 for improvement of the schools.

—Pontiac, Mich. The citizens recently held an election to vote $1,965,000 in bonds for new buildings to care for the present enrollment. The new buildings are necessary in order to eliminate the present temporary structures and basement rooms.

—Mansfield, Ohio. The school board has appropriated the sum of $2,760 for the installation of the Gamewell signal system in three schools.

—New York, N. Y. Giving distinctive names to elementary schools has been discontinued. Schools having such names will be allowed to retain them, but new schools will be known hereafter by number. Special names will be assigned to secondary schools.

—Contracts have been let for the construction work on a new high school to be erected at Nyack, N. Y., at a total cost of $518,538. The building will be erected from plans prepared by Architects Sibley & Licht, Palisade, N. J.

—Bids have been received for a junior-senior high school, to be erected at Princeton, N. J., at a cost of $750,000. The plans for the building were prepared by Architects Sibley & Licht, Palisade, N. J.

—An elementary school will be erected at Tenafly, N. J., at a cost of $250,000. The building will be erected from plans prepared by Architects Sibley & Licht, Palisade, N. J.

PERSONAL NEWS OF OFFICIALS

—Dr. Frank B. Dyer, formerly superintendent of schools of Cincinnati, Ohio, has been reelected to the board of education of the city by an overwhelming vote.

—The new members of the board of education of Philadelphia, Pa., appointed by the local judges for a term of six years, are C. C. A. Baldi, Thomas S. Boyle, Mrs. Anna Lane Lingelbach, William Rowen, and Harry T. Stoddart. The board has reelected William Rowen as its president. Mr. J. W. Catherine was elected vice-president. William Dick was reelected secretary and business manager. The hold-over members of the board are J. W. Catherine, Edward Martin, Laura H. Carnell, A. W. Horton, S. Solis Cohen, George A. Welsh, and T. A. Bedford.

—A resolution of appreciation of the services of the retiring members of the board of education of New Castle, Pa., was adopted recently by the board. The three retiring members of the board are James K. Love, president of the board; John A. Butler and Andrew Dietterle. Supt. C. C. Green, in a short speech, expressed his appreciation of the cooperation of the retiring members and his regret that they would not accept reelection. The three members expressed to the chairman of the board, Mr. James K. Love, their appreciation of the uniform courtesy and fairness with which he presided over the deliberations of the board.

—Mr. Austin J. Gibbons has been elected assistant superintendent of schools and purchasing agent at Manchester, N. H.

—Mr. J. L. Joslin has been appointed purchasing agent for the school board of Dallas, Texas. Mr. Joslin succeeds M. F. Foote, who retired after nine years of service.

—Mrs. Mary E. Merrill, 96, the first woman to serve as a member of the school board of Milwaukee, Wis., died at her home in that city. Mrs. Merrill served one term on the board.

Personal News

—Mr. John E. Wade, formerly district superintendent of schools of New York City, was recently elected to the position of associate superintendent, to succeed the late Dr. Stitt. Mr. Wade is a graduate of the College of the City of New York and of Columbia University and holds degrees given by these institutions. He has had considerable experience as a teacher and principal in the New York schools, and has served as district superintendent since 1902.

—Mr. E. Shorrock, who has completed 24 years of service on the school board of Seattle, Wash., has been elected president of that body for the year 1928. Mr. O. B. Thorgrimson was elected vice-president, and Mr. R. W. Jones was reelected as secretary.

—Mr. Guy Fox, formerly a principal at Colorado Springs, Colo., has resigned in order to accept a position as assistant director of research at Denver. Mr. R. J. Wasson has been appointed to succeed Mr. Fox at Colorado Springs.

—Mr. Virgil Steinbaugh, principal of the high school at Delphi, Ind., was recently elected state high-school inspector of Indiana, to succeed Mr. Eugene Butler.

Fairfax High School Gymnasium — Los Angeles, California — A Forest of Ferrometal Dressing Compartments

NO SPECIAL LABOR REQUIRED FOR INSTALLING. NO DRILLING OR CUTTING IN THE FIELD.

COMPLETE INSTALLATION SERVICE BY OUR REPRESENTATIVE IN YOUR CITY.

FERRO METAL TRADE MARK

WE INVITE THOSE WHO ARE INTERESTED TO SEND OUR SERVICE DEPARTMENT ROUGH LAYOUT OR BLUE PRINTS FOR ESTIMATE OF FERROMETAL PARTITIONS. CATALOG NO. 11 ON REQUEST.

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CHICAGO 3022 NORTH ROCKWELL STREET REPRESENTATIVES IN ALL PRINCIPAL CITIES ILLINOIS

LANDSCAPE DEVELOPMENT OF SCHOOL GROUNDS

(Concluded from Page 49)

It would be impossible to generalize the actual development of grounds. Each problem needs to be studied on its own merits, and we make a real effort to give individuality to each school. This is all the more inviting in Denver since practically each building has been designed by a different architect.

The matter of scale is given a great deal of weight, large buildings demanding tree groups where small elementary schools can well be framed in by proper shrubs. Horizontal or vertical building lines can be emphasized by the landscape architect in his plant material (see illustrations). Harsh angles and uninteresting texture should be softened by growing shrubs and vines. Color is essential in the choice of shrubs and flowers which should harmonize with the brick, stucco, or other trim of the building. We have been able to create especially interesting color contrasts in winter and fall, with the cream-colored brick of some of our buildings.

In general, we try to have our planting simple, dignified, but individual and of intensive interest. The open-lawn idea with border planting is in most cases indicated for those reasons.

The plant material used, naturally, is the kind specially hardy in our arid, irrigated region. Among the larger trees we find American Elm, Soft Maple, White Ash, Honey Locust paramount. At the same time we are starting a modest arboretum at high schools and junior high schools where additional trees, as other varieties of elm and maple, oaks, poplars, willows, sycamore, linden, coffee tree, hackberry, and others, are grown.

Some of our best shrubs are indicated in the key appended to plans of actual layouts.

In general, we restrict our flower planting to a minimum. Flowers on the whole require more care, have only transient beauty, and are at their best at a time when the schools are closed. Exception must be made for spring flowering bulbs, fall perennials, and such enduring annuals as snapdragons, marigolds, petunias, and a few others, illustrated in the photographs.

The whole matter of planning might be summed up as follows: logical layouts; simple, moderate, but effective planting; concentration of interest during the school season; and harmony in scale, texture, and color.

A few cost data will be given and the matter of maintenance discussed in the next article.

ELYRIA ELEMENTARY SCHOOL, DENVER, COLO.
This building is located in an unfavorable section of the city and provides a genuine beauty spot in an otherwise drab street.

NEW YORK CITY BOARD OF EDUCATION ADOPTS RATING SYSTEM FOR SCHOOL CUSTODIANS

The New York City board of education, with the opening of the new year, has introduced a new rating system for public-school custodians. Principals in the schools have received copies of the rating blank which must be filled out by them evaluating the services of the custodians and reporting upon the cleanliness of the buildings.

The reports upon the services of the custodians will be made out triannually, and will be presented immediately after the opening of school in September, after the Christmas vacation, and after the Easter vacation period.

The new system extends to the custodial force the "satisfactory" and "unsatisfactory" plan which has been in use for a number of years in rating the services of teachers. It also parallels the teachers' system in that it calls for individual ratings on 27 elements of cleanliness having to do with the internal and external conditions of school premises as compared with the 36 elements which constitute good teaching. It calls for a general report on the condition of the mechanical equipment such as boilers, engines, motors, blowers, and pumps.

The 27 items upon which principals are asked to note the satisfactory or unsatisfactory service of custodians are as follows: Sidewalks, yards, outside walls, lawns, snow removal, areas, entrances, exits, playrooms, corridors, stairways, pupils' toilets, teachers' toilets, pools and showers, sinks and drinking fountains, classrooms and shops, auditorium, basement, roof and leaders, window glass, fire-fighting systems, clocks, and finally, attitude toward teachers, supervisors, and the public.

Schoolhouse Dedications

—The new Jefferson school, at Muscatine, Iowa, was opened with dedicatory ceremonies by President Charles C. Hagermann of the board of education. Rev. V. L. Schoutz delivered the principal address.

BAR THESE DISEASE CARRIERS

TYPHOID

TUBERCULOSIS

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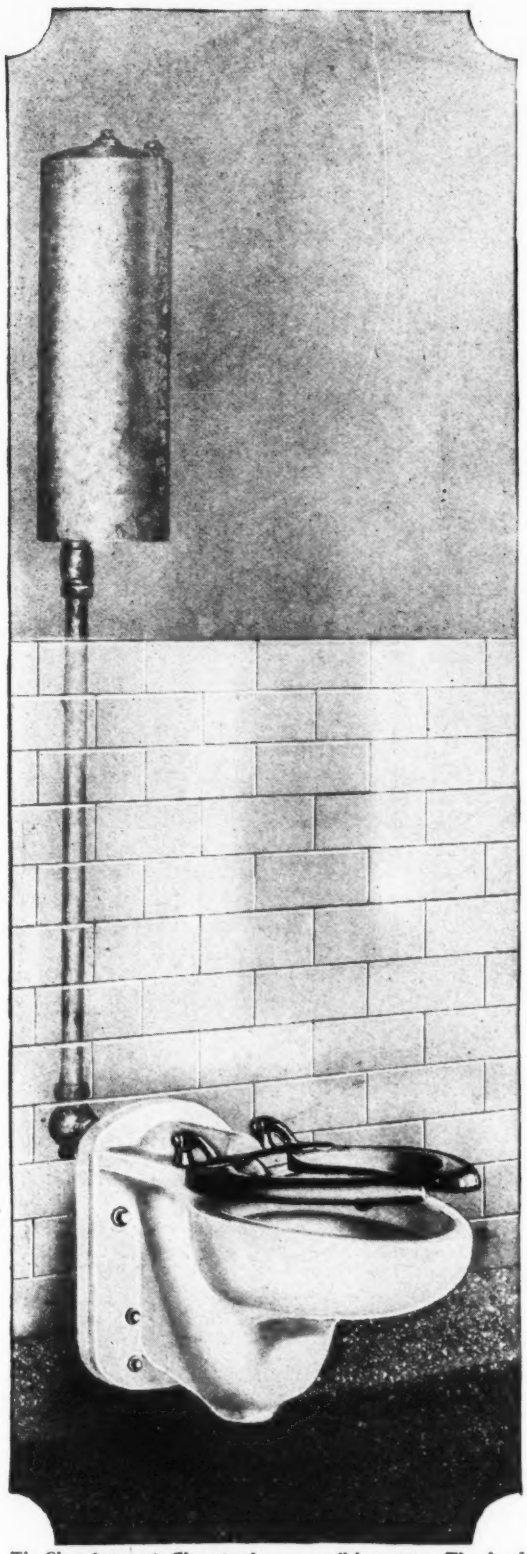

The Clow Automatic Closet in the new, wall-hung type. The closed top tank is placed behind the back wall in a utility corridor.

with Sanitation-Assuring Clow Automatics

—*Clow Automatics Never Forget*

A SINGLE unflushed closet in a school is more dangerous than a stick of dynamite. Leave it unflushed—as careless children do—and it becomes an attractive lure to flies. They quickly start their work of spreading any disease left there, to the lunch boxes, lips, and hands of children.

The Clow Automatic Closet removes all possibility of forgetful children leaving closets unflushed. Automatically, after every occupation, a fast, sure flood of water — with the pressure of a thirty-foot standpipe — scours the entire bowl.

The Clow-Madden Valve is simply constructed. It has no intricate parts to get out of order. It lasts longer — asks less for repairs — and uses less water.

By leaving nothing to childish memories or intricate mechanisms, the Clow Automatic gives certain sanitation to the school.

Our "Clow School Plumbing Booklet" fits your files, and shows the way to surer sanitation.

JAMES B. CLOW & SONS
201-299 N. Talman Ave.
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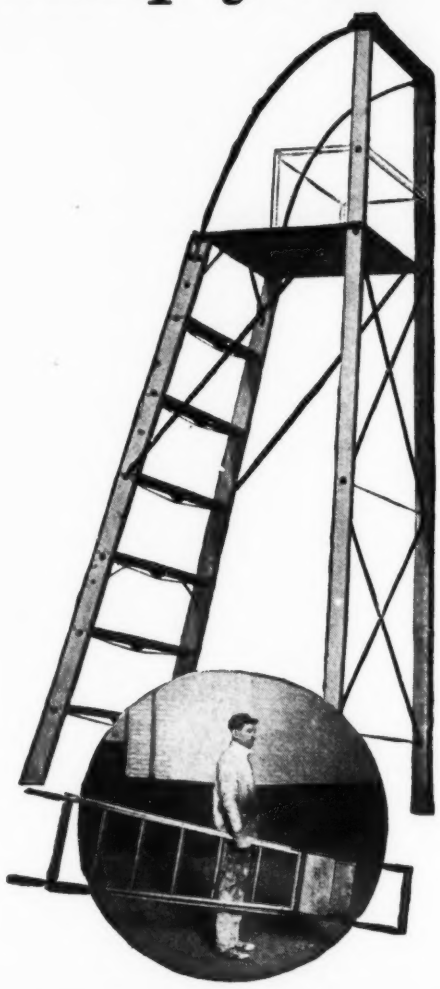
AUTOMATIC CLOSET

Forty-Eight Styles, Heights And Types To Meet Your Requirements

Help your workmen do better work



More than 20,000 ladder accidents each year testify to the danger and costliness of using ordinary step-ladders for cleaning, painting, and repair work in your school buildings.

The Dayton Safety Ladder, with its wide leg-spread and broad platform protected by high guard rails, is SAFE. On its platform, one or two workmen with their tools or other equipment beside them, have both hands free, do better and faster work. Adopted by many school boards, and by leading hotels, apartment and office buildings, as their only ladder.

The Dayton is made of steel-braced aeroplane spruce, in sizes 3 to 16 feet. Has folding auxiliary step for extra height when needed. Easily carried, or stored; moderate in price.

Write Department ASBJ-2
for complete information

DAYTON
Safety Ladder

THE DAYTON SAFETY LADDER COMPANY
121-123 West Third St., Cincinnati, Ohio

NEW RULES & REGULATIONS

FIRE DRILLS IN THE SCHOOLS

The subject of fire drills receives attention in a workbook for school principals and supervisors prepared by Robert Hill Lane of the Los Angeles, Calif., school system. In order to systematize fire drills so that they may become as nearly automatic as possible, he notes the following points:

1. *Preparation.* Instructions as to the routine of fire drills noting exits, routes, etc., must be posted in each classroom and pupils must be familiarized with the routine by the teacher.

2. *Exits.* Fire drills should be conducted occasionally on the assumption that one half the exits are available.

3. *Frequency.* Fire drills should be held as often as necessary until routine is established, thereafter at least twice in each school month.

4. *Variety.* Drills should be given under varying circumstances and at varying hours.

5. *Doors.* Doors of all exits must be unlocked and easily opened from the inside at all times during school hours.

6. *Signals.* Two bells or two rings with perceptible pause indicate "immediate fire drill, pupils to go to street in charge of teachers without delay for books, wraps, or other cause."

7. *Location of Signals.* Every teacher and janitor should know the location of the signal apparatus and be able to sound the fire-drill signal from any floor or basement.

8. *Emergency Signals.* The principal must devise effective substitutes in case signals are out of order and should see that such substitutes are understood by teachers and pupils.

9. *Testing.* Apparatus should be tested each morning before school opens.

10. *Signal to fire department.* Principal, teachers and janitors should know the location of the nearest fire-alarm box. In case none is available a routine for notifying the fire department by telephone should be established.

11. *Fire-extinguishing apparatus.* Principal, teachers, and janitors should know the location of fire-extinguishing apparatus and hose reels and how to use them.

12. *Control.* Each teacher is responsible for the control of the class during fire drill.

13. *Speed.* Classes should move at a rapid walk; running leads to confusion and consequent loss of time.

14. *All out.* The principal and one or more designated assistants must inspect the building to see that all persons have left.

15. *Special Classes.* Special provision must be made for children physically handicapped.

16. *Location of classes on yard or street.* Pupils should march to points in the yard or street far enough away to insure safety and to prevent interference with fire department.

17. *Cooperation.* Fire drills should not become perfunctory; teachers should seize the opportunity to teach self-control, good posture and school spirit as component parts of a superior fire drill.

18. *Inflammables.* Accumulations of combustible material must not be allowed in any part of the building.

19. *Assemblies.* A routine for auditorium purpose should be worked out and made automatic by repetition.

20. *Report.* The principal should make and keep a report on each fire drill both for his own protection and to provide material for further study of his routine.

RULES AND REGULATIONS

The board of education of Buffalo, New York, at a recent meeting, adopted the following regulations to govern nonresident pupils:

1. No nonresident pupil may be admitted to any of the public schools of the city of Buffalo, except upon payment of the tuition fee required, without the consent of the board of education.

2. A nonresident pupil is a pupil whose father, mother, or legally appointed guardian does not live in the city of Buffalo. A pupil is not a resident of the city of Buffalo if his parents or guardian live outside the city, and the pupil lives with an older sister or brother, an aunt or uncle, or with grandparents. Each principal must ascertain the exact location of the residence of the parents of each pupil registered in his or her school.

3. Any nonresident pupil whose legal guardian or parent pays city taxes on property located within the city of Buffalo is allowed to have one fourth (25 per cent) of the amount of said city taxes deducted. This applies only to city taxes, exclusive of assessments.

4. The tuition fees are as follows:

High Schools, $160 per annum; Elementary Schools, $80 per annum; Vocational Schools, $160 per annum.

Payments may be made quarterly in advance as follows:

First payment not later than October 1; second payment not later than December 1; third payment not later than March 1; fourth payment not later than April 1.

A failure to make any payment for five days after they fall due will cause expulsion of such pupil without further notice.

5. The tuition for summer schools will be the same as for day schools of the regular year in their proportional part.

6. The tuition fee for evening schools will be as follows:

High Schools, $30 per annum; Elementary Schools, $15 per annum; Vocational Schools, $30 per annum.

7. The tuition fee for the Central Continuation School will be as follows:

High-School courses, $2 per month; Elementary-School courses, $1 per month; Vocational-School courses, $2 per month.

8. The principal of each school must send to the secretary of the board of education, before the close of the second week of school of each term, the names and addresses of all the pupils enrolled in his or her school, whose parents do not reside in the city of Buffalo.

9. The secretary is authorized to collect the tuition fees of nonresident pupils as established by the board of education.

10. The rules and regulations became effective immediately, with the exception of sections three and four, which relate to the rate of fees. The latter will become effective July 1, 1928. Until that time the rates in effect at present will be collected by the secretary of the board.

—The New York City board of education has intimated that it will inforce the by-law barring members of secret societies in the high schools from offices of honor in scholastics or athletics.

Back of this toilet seat is a guarantee that carries *no time limit*

EVERY Church Sani-Black Seat is guaranteed permanently—for the lifetime of any building in which it is installed. After years of constant usage, it will be as free from cracks and worn places as when it left the factory.

In hotels, industrial plants, schools, office buildings and public buildings of all kinds, where toilet seats are subjected to the most strenuous treatment possible—Church Sani-Black Seats are installed. Their superior wearing qualities are recognized. Their first cost is always their last cost. And their first cost is no higher than that of other toilet seats—less durable, less sanitary toilet seats that sooner or later have to be replaced.

The core of the Sani-Black Seat is formed by cross-grained layers of wood and rubber, vulcanized into a compact, solidly welded unit that will never warp nor crack. The outside covering is composed of a hard composition, vulcanized to the core under heat pressure. It completely seals the core. It has no joints—no breaks of any kind in its lustrous, jet-black surface. It cannot scratch, chip nor wear off.

This same hard composition covers the hinges on the all-black seats. They are completely sanitary. They cannot tarnish, rust nor become corroded. And they are held in place by screws, which are tapped through solid steel bars—molded *into* the seat core.

Let us send you, for your files, our illustrated, 100-page architects' catalog describing our full line of Sani-White and Sani-Black Seats! The coupon will also bring you an actual cross-section of the Sani-Black Seat. Fill it out and mail it *today* to C. F. Church Manufacturing Co., Holyoke, Massachusetts.

Church Seats
sani-black
LOOK FOR THIS NAME ON UNDER-SIDE OF SEAT

C. F. CHURCH MANUFACTURING CO.
Dept. 10-2, Holyoke, Mass.

Gentlemen: Kindly send me your architects' catalog, together with a cross-section of your Sani-Black Seat.

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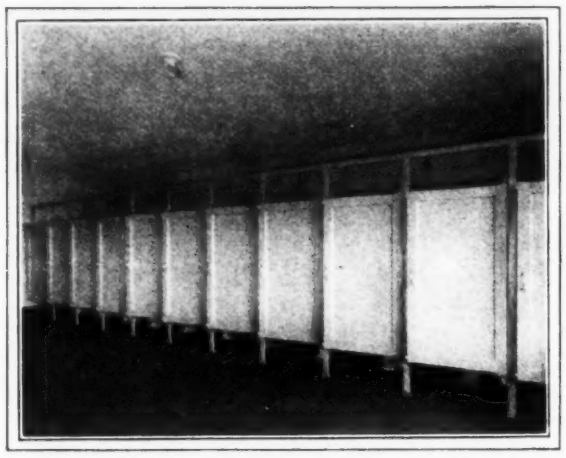

Maintaining Leadership

Backed by over fifty years of experience — aided by every modern labor saving device, and enjoying the continued and growing endorsements of architects and contractors all over the country, the Henry Weis Mfg. Co., has just completed in 1927, its biggest and most successful year. To a large degree, we attribute this success to the fine reputation of WEISTEEL products for reliability and durability.

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COMPARTMENTS

Toilet and Shower Compartments Dressing Room Partitions Hospital Cubicles

HENRY WEIS MANUFACTURING CO., INC.
Elkhart, Indiana (Formerly Atchison, Kansas)

Branch Offices:
NEW YORK CHICAGO
LOS ANGELES BOSTON
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Representatives in All Principal Cities

Largest Manufacturers of Toilet Seats in the World

Never-Split.
Evernu
Everlasting Hard Rubber
Seats

No. 580

Unconditionally Guaranteed

There Can Be No Other Exactly Like It

Evernu construction is patented. Many features that add greatly to the excellence and economy of these toilet seats are found **only** in Evernu Hard Rubber Seats. They are different from any other — and they always will be.

The exclusive features of Evernu Seats enable them to preserve their original glossy beauty through years and years of severest usage. That is the reason Evernu is so universally accepted as the ideal installation in school buildings all over the country.

Evernu Seats are molded of special hard rubber into seamless, jointless, **everlasting** units. The hollow centers give unusual lightness and great strength. Jet black or mahogany. Models for every type of bowl. **Unconditionally guaranteed.**

Send for our latest catalog and prices.

Public Schools Completely Equipped With Evernu, include those at:

Chicago, Ill.
New York, N. Y.
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Seattle, Wash.
Baton Rouge, La.
Tacoma, Wash.
Philadelphia, Pa.
Cleveland, Ohio
Mobile, Ala.
Dallas, Texas
Shreveport, La.
Pine Bluff, Ark.
Washington, D. C.
Long Beach, Calif.
Pasadena, Calif.
South Bend, Ind.
Columbia, S. C.
Terre Haute, Ind.
Dayton, Ohio
Cincinnati, Ohio
Oakland, Calif.
Amarillo, Texas
Richmond, Va.
Toledo, Ohio
San Antonio, Texas
Houston, Texas
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Baltimore, Md.
Winston-Salem, N. C.
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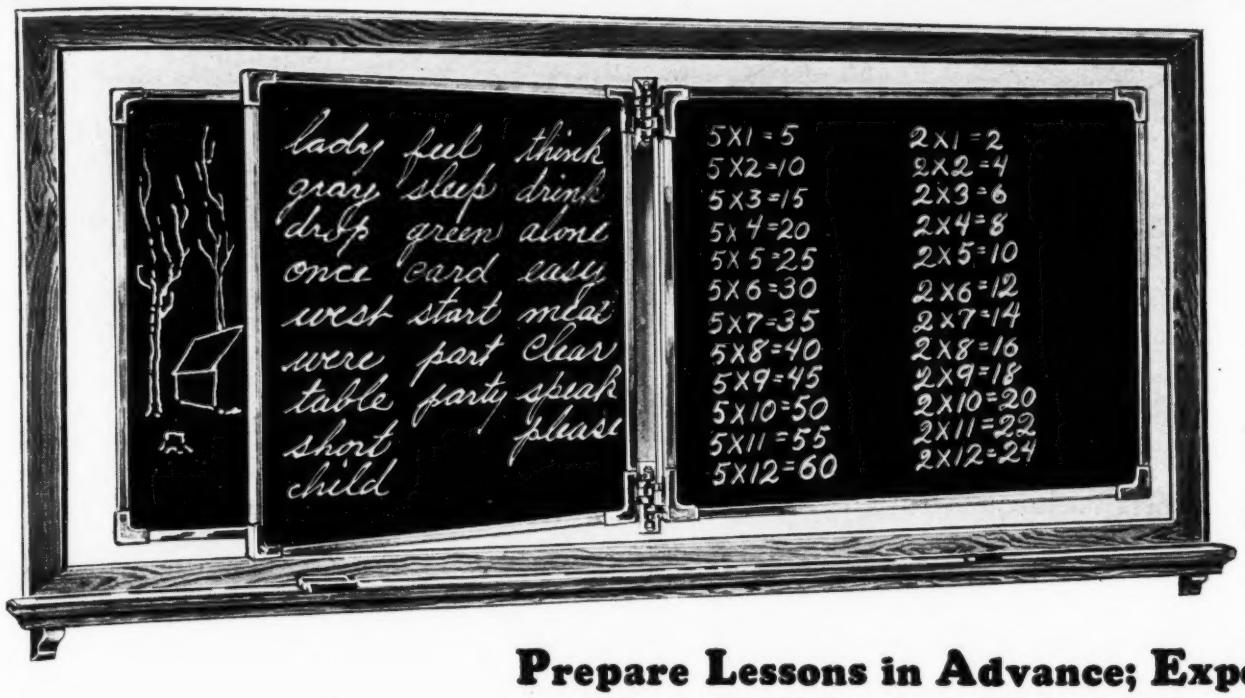
Never Split Seat Company
Dept. 132
Evansville, Ind., U. S. A.



Write for illustrated 8-page booklet which shows The Alternator in use, explains its advantages, suggests ideal blackboard arrangements for schoolrooms. Ask for Catalog T-2. See address below.

The Alternator
Swinging Blackboard

Prepare Lessons in Advance; Expose When Needed

Picture a blackboard that works like a giant book — four "leaves" of eight "pages"—giving the teacher ***eight individual blackboards*** on which to write exercises and test questions. ***Eighty-four square feet of blackboard space,*** convenient to handle and display to the class! This efficient, swinging blackboard is saving time and improving teaching conditions in thousands of schools throughout the nation.

With The Alternator, the teacher may prepare her blackboard lessons in advance and thus save time during the school period. The lessons and tests need not be exposed to the scholars until the proper time. To swing the boards in any position, the teacher merely gives a gentle push. The boards move freely, and stand in place at any angle where stopped.

The Alternator saves time, enabling the teacher to keep lessons from day to day. It is easy to handle, as there is nothing to lift. And there is nothing to get out of order, for the patented swinging device always works perfectly! The cost is amazingly low. Write for Catalog T-2.

K-M SUPPLY CO., 123 West Eighth St. **Kansas City, Mo.**

CHILD ACCOUNTING: ITS ACHIEVEMENTS AND PROBLEMS

(Continued from Page 54)

tional unit. Immediately then, the major problems for child accounting study will fall within the range of the individual state. These may be considered from the standpoint of: (*a*) organization; (*b*) administration; (*c*) records, and (*d*) legal.

Organization. In the field of child-accounting organization there are numerous problems demanding attention. Shall child accounting be organized as a centralized state activity, or shall it be decentralized, with the state department acting only as a checking or appraisal body? Shall the record activity be unified and specifically determined in all of its minor aspects or shall the state furnish only the framework necessary for immediate administrative and appraisal purposes, allowing the individual district rather wide choice in respect to detailed organization? There are many points of view in respect to these problems and only a little objective evidence at the present time upon which to base a decision.

Administration. The same problems apply to the direct administration of child accounting. Shall the activity be administered completely by officers appointed and controlled by the state[11] or shall the traditional practice of local control be continued? Shall county and city superintendents be intrusted with the activity of enforcement or shall further delegation be made to smaller local districts? Both practices are in vogue, each developing, apparently in terms of tradition, rather than in terms of evidence.

Records. Much research is required upon state child-accounting records in terms of mechanics, number, and use. In the interests of efficiency the records should be made as few in number and as simple as possible. The approach may be made from the standpoint of primary records, census and accounting, contact records, secondary records, and appraisal records. Some good work has already been done in this field in Michigan and Iowa. Much more remains to be done. State child-accounting systems must eventually be simplified to the highest possible degree in the interests of time saving and accuracy, through research, the criteria of *use* must be carefully applied to all records.

Legal. Research may be made cooperatively with the federal bureau in the legal field. Compulsory-education and child-accounting laws must be studied and considered in terms of present-day knowledge of individual differences. It is extremely doubtful whether blanket legislation in this field is desirable today. The reorganization of compulsory-education laws should be approached and considered by the trained specialist in order that the legal enactments may more efficiently meet present-day demands. Further fields for legal study present themselves in states where the child-accounting activity had not yet been considered and developed.

b) *Local.* The local child-accounting problems may also be considered in terms of: (*a*) organization; (*b*) administration; (*c*) records; (*d*) home contacts.

Organization. The factor of local organization is somewhat contingent upon the policy of the state in respect to centralized or decentralized organization of the child-accounting activity. In the case of a centralized organization, the local district would lose control of the enforcement activity. Under a decentralized organization, the local district would exercise full control over this activity. The problems involved are the organization of enforcement districts, the responsibility for enforcement, and the methods of enforcement. Under the head of the school census are also many problems affecting vitally the larger districts. The future problem of the nursery school demands the early organization of the census to include children of all ages in order that the extent and the probable cost of this addition to the public-school system can be scientifically determined in advance. The development of the activity of vocational guidance and follow-up calls for intensive study of the older age groups. The technic of census taking itself is in a very rudimentary stage. Even the best examples of school-census organization today provide only for an annual head count with a continuing check record from year to year. In view of our extreme mobility of population the inadequacy of such organization is at once apparent. The greatest problem of the future in the field of school census appears to be the development of a technic whereby the census may be actually continuous, correct within a period of 24 hours. The organization of such technic presents numerous difficulties and must be experimentally developed.[12]

Administration. What is the most effective method of administering locally the child-accounting activity? There is little available objective evidence. Administration must be considered from the standpoint of enforcement and accounting within the individual school and for the system as a whole. It is generally recognized today that enforcement is a health and a social problem. The method of administering enforcement must therefore be carefully studied.

[11] *The Enforcement of Compulsory-Attendance Laws by Local Officers,* by John F. Bender, AMERICAN SCHOOL BOARD JOURNAL, November, 1927, p. 37.

[12] Hamtramck (Michigan) procedure. Public School Code, Part III, Chapter IX.

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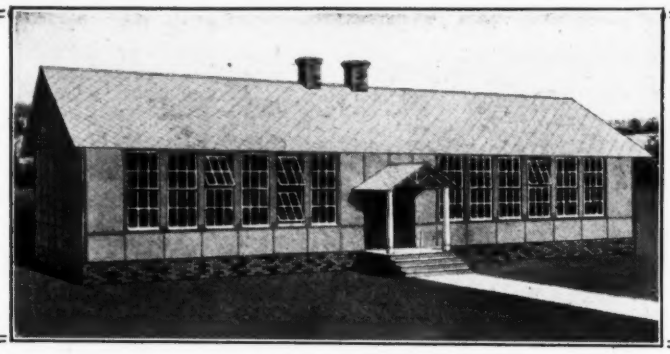

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A Permanent School Building for the Cost of a Portable One

Paneled, roofed, sheathed with **fireproof** Ambler Asbestos building material of the most permanent and substantial type. The upkeep is negligible, as the main areas of these unique buildings have absolutely no need for paint.

Shipped in standard, easily-handled sections that can be speedily erected at any time of year, yet the buildings have the appearance of structures costing several times as much. Can be salvaged later at a large part of original cost.

"The Liberty" Fireproof Asbestos Schools are approved by the State Department of Public Instruction of Pennsylvania and New Jersey for **Permanent School Buildings.**

"The Liberty" Schools are supplied in various sizes ranging from one room, up to Consolidated or Community Schools which may require a dozen rooms or more.

We will be delighted to furnish an estimate covering your needs and tell you of the many school supervisors we are serving.

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Shall the traditional attendance officer be intrusted with this activity or shall enforcement be administered by trained social workers and visiting teachers? What is the type of personnel that will be most successful in this field? What shall be the technic of operation?

All of these problems must be considered as solved. In respect to the individual school, shall the accounting activities be thrown upon the teacher or are other methods of internal administration more effective? In studying individual school systems we find all conditions and all types of practice. When we attempt to study the evidence in favor of one or the other, there is little immediately available upon which to make objective appraisal.

Records. The field of local records offers a splendid opportunity for research. Most of our present-day record systems have been built up in terms of traditional use and, as a result, one is confronted by the multiplicity, complexity, and time-taking factors in internal child accounting. Recently I was called into consultation in a school system to study internal school records. In the secondary school alone, there were more than 80 different forms and reports. The amount of time and money spent upon these amounted to a large sum. Careful and objective study of needs showed that all of the essential information could be secured from fifteen forms, with a large reduction of time and expense in form printing.

Objective research should be made in every school system in the interests of greater efficiency in internal child-accounting procedure by discarding traditional practice and appraising and organizing records in terms of *use* and *value*. Much emotional disturbance results from poorly organized and superfluous records. In this respect there is another problem that belongs primarily to the teacher-training school. Teachers should be trained in the value and use of records. They are an essential complement to teaching and require both skill and understanding. Fortunately, many of our institutions are beginning to realize the significance of such training and are making provision for it.

Home contacts. The home-contacts reports, as a whole, require much study. This is also a problem in public relations. It is doubtful whether any highly formalized and standardized forms will satisfy the diverse needs of the modern community. This subject is now receiving attention from Ashbaugh[13] and others. It offers an unusual field for experimental activity.

Summary. Child accounting is a relatively young development in its scientific aspects. Considerable progress has been made in the isolation and consideration of the general problem. A number of good attempts have been made in terms of state organization of the activity, notably in Michigan and Indiana, and projected development in Iowa and Colorado. despite these signs of progress, the problem has not been solved. A great amount of careful research is fundamental to the many phases of the subject before relative certainty can be attained. In terms of our philosophy of education, it is doubtful whether child-accounting procedure should ever again become so completely routinized, standardized, and static that the machine works because of the traditional impetus, instead of in terms of value to education. This danger can be easily avoided if we set up child accounting and other organization in terms of functional activity. This means that we must base our primary plan upon the results of objective study; execute the plan intelligently in terms of its worth and value to instruction, and provide for means whereby change can be made in terms of objective evidence of better and more useful procedures.

[13]Ohio State University.

THE SUPERINTENDENT OF SCHOOLS IN A CITY OF FIVE THOUSAND

(Continued from Page 55)

24. *Every person, parent, teacher, or child bringing in a problem to the superintendent has a right to a definite answer.* The answer may not always be satisfactory, but the person should know what he gets, even if he does not get what he wants. There is no excuse for evasion.

25. *The superintendent should take an interest in the outside activities of the school;* the personnel and progress of the athletic teams; the character of the various entertainments given; the underlying purpose of organization of the various school societies; the proper management and supervision of social activities of the school; the financial aspect and the literary quality of the annual and other publications; and he should keep in close touch with the thousand and one other matters which now come under the jurisdiction of the schools.

26. *He frequently will be given confidences by the pupils, teachers, and parents.* These should be preserved inviolate and sympathy and advice given to those who need them.

It is manifestly impossible for any manager to personally attend to all of the details of the plant which he oversees. A test of his ability is his skill in the selection of subordinates, and the delegation of authority. The wise superintendent will give every teacher responsibility to the extent to which that teacher is able to carry it, and full authority in her own sphere to the degree possible within the limits of the general organization.

Turning from the duties of the superintendent to qualifications which he should possess, the following may be named, and the greater the degree in which he possesses them,

(Concluded on Page 140)

TACOMA [WASH.] SCHOOLS
All floors treated with Car-Na-Var

Tacoma Public Schools

Tacoma, Washington.

Continental Chemical Corp.,
Watseka, Illinois.

Gentlemen:

In answering your request for a statement of our opinion of the Car-Na-Var floor Treatment it is thought that the best recommendation will be the enclosed requisition for one barrel (55 gals) Car-Na-Var.

We received our first shipment of your Tri-C Products late in August and finished the maple floors throughout one of our Intermediate Schools (Jason Lee) with your treatment. The results have been so satisfactory that the Board of Directors has authorized the use of this finish for all hardwood floors throughout our system of forty-four schools. We find that sweeping is very much easier and that there is practically no dust raised.

Yours truly,
A. I. Matthews,
Supt. of Properties.

SCHOOLS

from one end of the country to the other are using and indorsing this floor treatment

Combines the ideas of Varnish and Floor Wax but is very much more durable and practicable than either by itself. Use it on wood, terrazzo, tile, linoleum, etc.

For beautiful, safe and sanitary floors—

use

CAR-NA-VAR

TRADE MARK REG. U.S. PAT. OFF.

THE PERFECT FLOOR TREATMENT

It's applied with a mop

Supplied in "Natural" and popular colors. Filler and Finish combined

on all school floors it's non-slippery

See our exhibit and demonstration at the convention of

The National Education Ass'n

Boston, Feb. 25th to March 1st
Booths 128 and 129

If you do not plan to attend the convention write us at once for full particulars.

Manufactured only by

CONTINENTAL CHEMICAL CORP.

Watseka **Dept. S. J.** **Illinois**

Warehouse stocks in

New York **Columbus** **Los Angeles**

Hendersonville City Schools

Hendersonville, N. C.

Continental Chemical Corp.,
Watseka, Illinois.

Dear Sirs:

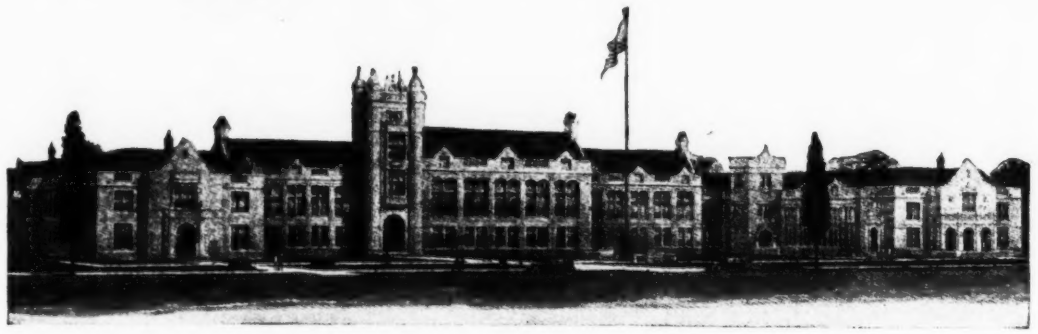
For several years we have been investigating floor dressings and using chiefly floor oils. This year we definitely determined to get away from these as far as practicable. After searching for the best available floor preparation, we decided upon Car-Na-Var, which we have tried this season with gratifying results. It combines both the qualities of preservation and a good clean durable finish.

We have received our second 55 gallon shipment of Car-Na-Var and the results have been so satisfactory that we shall use this finish for all hardwood floors throughout our system. We find that the use of this preparation very greatly simplifies the care of our hardwood floors.

Very truly yours,
A. W. Honeycutt,
Superintendent.

HENDERSONVILLE [N. C.] SCHOOLS
All floors treated with Car-Na-Var

GUNN "LINO" Trademark Reg. DESKS and TABLES for SCHOOLS



Fordson School, Fordson, Mich. H. J. Keough, Architect.

"LINO" Desks for Teachers

"LINO" Tables are popular for Cafeterias-Libraries and All Departments

Quiet - Pleasing
No breakage of tops.

Our *New Two Color Tops* are exceedingly decorative.

Catalog and Sample of top on request.

The Gunn Furniture Co.
Grand Rapids, Mich.

40 Years Builders of Desks and Tables

(Concluded from Page 138)

the greater will be his service to the community which employes him.

Nine Important Qualifications

First, the superintendent must be fair. He must be able to see the child's, the teacher's, and the parent's viewpoint in a noncontroversial manner, and many times to put himself in the place of another.

Second, he must be firm. If he makes a decision, he should not be swayed from it unless convinced that the decision was not sound.

Third, he must be tactful. The greater his tact in dealing with delicate situations, the longer and pleasanter his period of usefulness will be.

Fourth, he must have a sense of humor. Unless this is fairly well developed, the probabilities are that he will become a chronic worrier and pass on to his eternal reward at an early age unmissed and unlamented.

Fifth, he should be a good mixer, and keeping in mind that he is serving the community as a whole, should not align himself with any group or faction if it is possible not to do so without loss of self-respect.

Sixth, he need not be a reformer, but at all times should avail himself of his rights as a citizen to stand for worth-while movements regardless of the antagonisms which may be thus developed.

Seventh, he should be forward looking and must possess adequate knowledge of psychology and educational procedure so that he may properly direct the progress of education; in other words, he must be professional.

Eighth, he should be sympathetic, but should meet his problems squarely.

Ninth, he should take an interest in the affairs of the community and should take his part in various civic enterprises, but it is perfectly proper for him to decline to engage in projects which will unduly encroach upon his time.

The work of the superintendent is fascinating because it deals with young life, and it is valuable because it gives an opportunity for the highest type of service in molding the character of education for the youth of a community. There are disadvantages, however. Among these is the fact that it is impossible for any individual in a public position to satisfy all of the people of a community. The only thing that can be done is to adhere to policies which best serve the interests of the children, and trust that these policies will eventually vindicate themselves.

Another disadvantage is the uncertainty of tenure. The public schoolman is often looked upon as a transient, regardless of the length of his period of service; and it is frequently unwise for him to buy a home because of the probability that he will have to sacrifice when his tenure ceases. Thus he is prevented from establishing vital interests in a community, and frequently from making moderate investments as the opportunity may arise.

The superintendent is vulnerable to attack; is frequently misunderstood, and often faces old age with the knowledge that he has spent a lifetime in the service of youth, and at a time when other professional men are coming into the period of their greatest usefulness because of the richness of their experience, he is confronted with the necessity of looking for another position because the community has decided that it wants to employ a younger man.

The city superintendents are, as a rule, professional-minded, sincere, hard-working men. All schoolmen are bound to make mistakes, due to the complicated nature of their work, but most of them are honestly striving to give real service. The superintendent has the same home problems that other people are struggling with —livelihood, education of children, etc. He needs cooperation on the part of the board of education. An occasional word of encouragement may stimulate him to greater efforts than a volume of criticism.

THE "BACK SEAT" SCHOOL DRIVER

"One of the standing jokes of this nation is the 'back-seat' driver. We appreciate the absurdity and folly of this form of mental attitude, hence treat it with derision and make it a target for our jests." So says an anonymous writer in the *Texas Outlook*, and then adds:

"There is evidence of 'back-seat driving' in our educational institutions. Business men and college alumni have been known to dictate the selection of an athletic coach. Members of a board of education elected on the basis of their party affiliations furnish another instance of 'back-seat driving.' A board of education, appointed by a mayor yet subject to political changes of city administration, furnishes another.

"Members of the board of education, as representatives of the people, are entrusted with the conduct of the schools. They, in turn, select the school executive, the 'driver.' He confers with his board of education, with his teaching force, with parent-teacher and similar cooperative agencies, as to the route, the speed of travel, the type of machine and such, *but he will do the driving.*

"In the conduct of the schools the greatest efficiency is to be expected of the driver. He it is who is in the best position to guide the schools on the road of service for the safety of the pupils and the community. Yet too often is he subjected to the distractions and hazards of 'back-seat driving' by self-seeking political and personal influences. These 'back-seat'

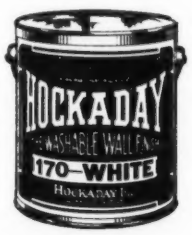
(Concluded on Page 142)

Belshazzar's Walls should have been "Hockadayed"

How that famous king of Babylon must have felt when his banquet guests looked up and saw handwriting all over his nice, clean wall!

What Belzhazzar probably saw was merely cracks, or limeburn, or some such common paint defect. But he was superstitious and it scared him plenty.

Even today, blemished walls make the building owner shiver. They foreshadow a big expense—a general repainting job that may last a few years and then have to be done over again.



But why, in this day of Hockaday, does anybody have to see this "handwriting on the wall"? Hockaday positively prevents limeburn, air checking, suction, and peeling. It spreads further and lasts longer. Two coats are sufficient. Best of all, Hockaday is washable. You can make a Hockadayed wall look new again, after years of service, by giving it a once over with a scrubbing brush.

The WALLMARK of Quality

Belshazzar would have escaped a lot of trouble if his walls had been Hockadayed. Modern builders have the advantage. That explains the clean, smooth walls you see in so many of the latest and finest buildings. Write for the booklet, "Paint Mileage," and get the facts.

HOCKADAY, Inc.
1823-29 CARROLL AVENUE, CHICAGO.

HOCKADAY
THE WASHABLE PAINT FOR ALL INTERIORS

for schools

Kibler High School, Tonawanda, N. Y. One of the many modern schools equipped with the Beaton & Cadwell Simplex Flush Valve. Edward B. Green & Sons, Architects.

Flush Valves for closets used by children must meet rigid requirements.

Simplex Flush Valves deliver just **one metered flush** regardless of how much the push button or oscillating handle is operated.

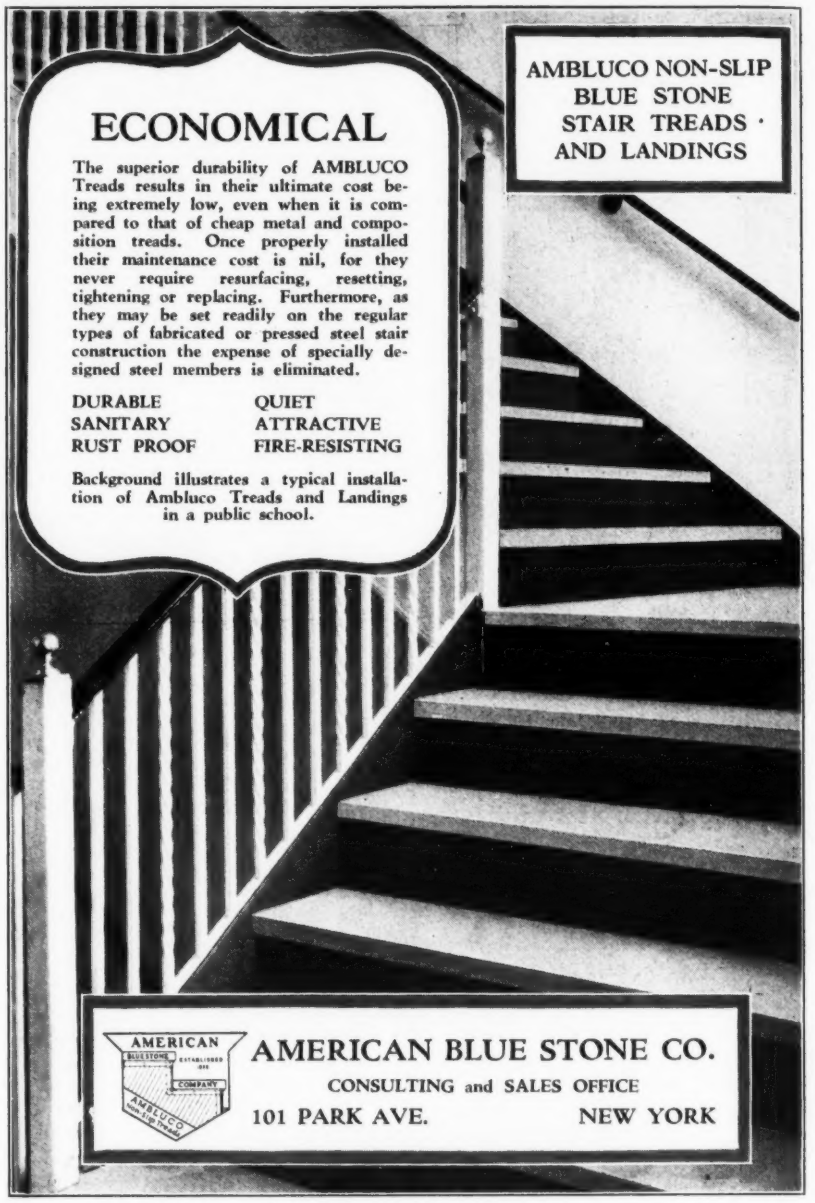
The time plug arrangement, adjustable from the **outside** of the valve, regulates the operation of each Simplex Flush Valve to meet requirements of pressure and type of fixture.

These and other outstanding features make the Beaton & Cadwell Simplex Flush Valves ideal for schools.

Send for the catalogue explaining the many advantages of—

SIMPLEX FLUSH VALVES

THE BEATON & CADWELL MFG. CO.
Established 1894.
NEW BRITAIN, CONN.


AMBLUCO NON-SLIP
BLUE STONE
STAIR TREADS
AND LANDINGS
ECONOMICAL
The superior durability of AMBLUCO Treads results in their ultimate cost being extremely low, even when it is compared to that of cheap metal and composition treads. Once properly installed their maintenance cost is nil, for they never require resurfacing, resetting, tightening or replacing. Furthermore, as they may be set readily on the regular types of fabricated or pressed steel stair construction the expense of specially designed steel members is eliminated.
DURABLE
SANITARY
RUST PROOF
QUIET
ATTRACTIVE
FIRE-RESISTING
Background illustrates a typical installation of Ambluco Treads and Landings in a public school.
AMERICAN BLUE STONE CO.
CONSULTING and SALES OFFICE
101 PARK AVE. NEW YORK

(Concluded from Page 140)

drivers lack the highly specialized qualifications the educator must command. Their social viewpoint may be warped, their regard for public welfare may be blunted; yet they would dictate the direction the sensitive machine of education should travel.

"The management of our schools must be in the hands of those who are in the front seat of educational activities; those who are best equipped to guide the schools aright."

LOS ANGELES SAFETY TRAFFIC TUNNELS

(Concluded from Page 42)

erage cost of $10,000 each was higher than necessary and that they could be built for about $6,250 each. Fifty instead of 35 tunnels have therefore been planned for early construction. It is believed these 50 will largely take care of the dangerous crossings.

For the guidance of city authorities in selecting the best sites for constructing traffic tunnels for school children, 62 possible locations were se'ected under the auspices of a joint committee of the Los Angeles city board of education and the local automobile club. A traffic census of each location was taken by the engineers of the club in order to select those sections having the greatest need for protection. In this survey four elements of danger were given consideration: (1) the number of children crossing each day; (2) the number of vehicles passing during the corresponding time; (3) the speed of the vehicle; (4) the width of the roadway.

After a careful study of this report a list was compiled showing the dangerous crossings in the descending order of their importance. From this the council selected 26 locations for the first tunnels. Others have been chosen from time to time.

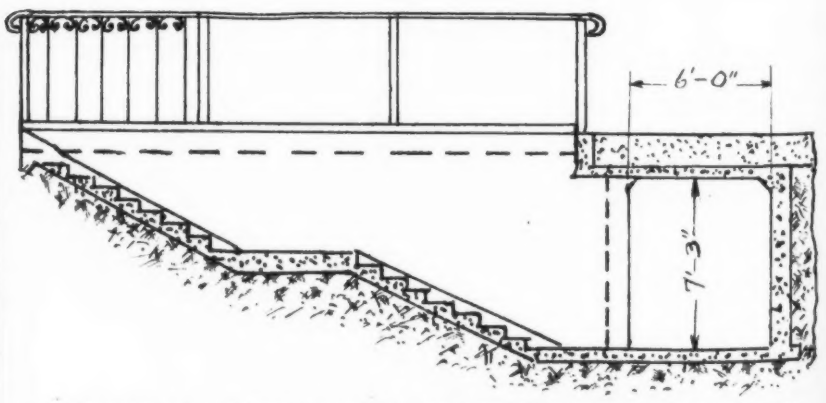
In general the tunnels are not long enough to require artificial lighting in the daytime, but are lighted at night by electric lights set in recesses in the walls. These lights are regulated by a time switch which automatically turns them on and off as required.

Owing to the absence of ice and snow in Los Angeles, it is feasible to leave the entrances open. Any rain-water that collects is carried to a sump connected with the sanitary sewer, or if too low for that, is drained by a small automatic sump pump.

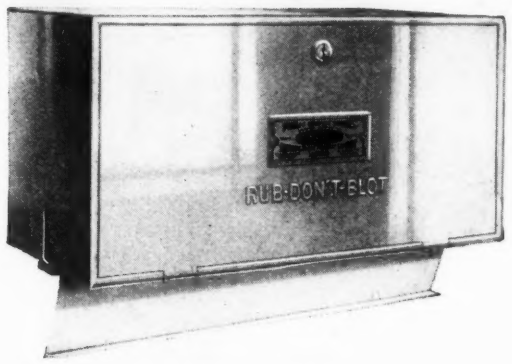
Experience has shown that with the general public it is difficult to get pedestrians to use tunnels even if crossing at the grade level involves considerable risk. It is a question if the cost of such tunnels could be justified at general street crossings. But with school children, where the use of tunnels can be made compulsory the case is different. A recent survey indicates that the school children use the tunnels, and seem to enjoy doing so.

—Mr. Albert G. W. Schlegel of Port Carbon, Pa., has been elected supervising principal at Red Lion. Mr. Schlegel is succeeded by Mr. B. L. Clark.

CHILDREN COMING UP FROM TRAFFIC TUNNEL, LOS ANGELES, CALIF.



SECTION OF A SAFETY TUNNEL, LOS ANGELES, CALIF., SHOWING THE ENTRANCE AND A CROSS-SECTION OF A TUNNEL.



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PUBLIC SERVICE paper towels are made with a patented hem [lower edge folded over] that keeps wet fingers from tearing them.

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Present users of cloth towels should consider the economical possibilities of paper towels. Those already using paper towels will be well rewarded if they investigate PUBLIC SERVICE paper towels before placing contracts.

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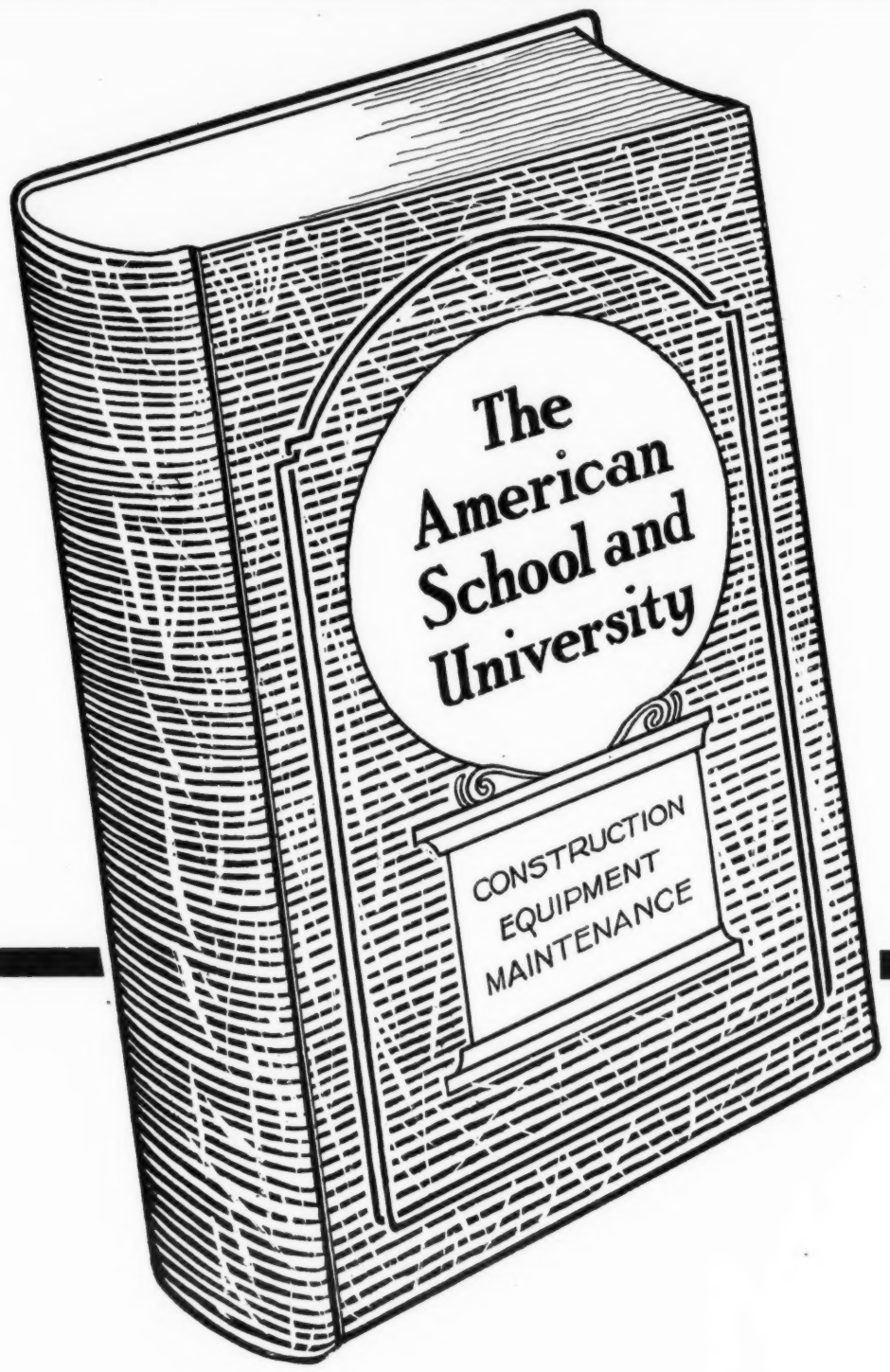

THE American City Magazine Corporation of New York announces its purchase of the University Purchasing Guide, heretofore published by William A. James, Inc., of New Haven, Conn. This annual buyers' guide for those active in the purchase of educational equipment will be published in future under the name of THE AMERICAN SCHOOL AND UNIVERSITY. Its scope will be greatly enlarged, and valuable illustrated text matter will be introduced, in order to make available for all educational institutions a yearbook covering the construction, equipment, and maintenance of school and college buildings. It is the purpose of the publishers to make this annual similar in value and importance to THE AMERICAN CITY's municipal yearbook, THE MUNICIPAL INDEX, a 700-page volume in general use by leading purchasing officials in the municipal field.

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ATLANTA USES NOVEL PLAN TO REVIEW STANDARDIZED PLANS FOR ELEMENTARY SCHOOLS

(Concluded from Page 58)

quoted in the Atlanta *Constitution* October 16 as follows: "Mr. Preacher's plans were complete in every detail and only minor changes were suggested. The plans were so nearly perfect that instead of tearing them up as many persons feared, the reviewing board praised them highly and complimented Mr. Preacher and other members of his organization."

STATE SCHOOL FUNDS AND THEIR APPORTIONMENT

(Concluded from Page 41)

teachers. A supervisory officer was provided in each county for every forty teachers in the elementary schools, the state paying the entire salary of one county-school attendance officer and two thirds of the minimum salaries of county superintendents, supervisors, and helping teachers.

For the sake of determining more accurately the effects of the equalization fund upon the equalization of school burdens, a study was made of certain selected counties. The results of this study are presented in Table IV and subsequent paragraphs.

The purpose of the above table is to show the effects of the equalization fund upon equalizing the school burdens of the counties. Taking as the measure of need the wealth per teacher in each county, the counties were ranked on this basis from richest to poorest. The effects of the equalization fund may be readily seen by comparing the data in columns 2, 4, 6, and 8. Carroll county, which ranks 12th in need, without aid from the equalization fund would rank 20th in the per cent of its revenue provided by state funds. In other words, there is a difference of 8 between its rank in need and its rank in the per cent of its school burden borne by the state, but after it has received aid from the state equalization fund it ranks 16th with respect to the per cent of its total school expenses paid from state funds. We have here, it might be said, an improvement of 4 points.

Comparing the data for each of the remaining ten counties included in our table, we discover that in the case of only three counties—Worcester, Prince George's and Kent—does the equalization fund fail to bring about a marked and beneficial adjustment. In the case of Kent, the equalization fund has no effect whatsoever upon the county's rank with respect to the percentage of its total current expenses which is paid from state funds. That there is great need for some readjustment here is shown by the fact that whereas Kent ranks 13th in need, in the per cent of her school burden which is borne by the state she ranks 21st. The situation in Worcester county is made actually worse by the present method of distributing state funds. This county ranks 6th in need. Before the apportionment of the equalization fund, she ranks 5th with respect to the portion of her current revenues which are provided by the state, but after the apportionment of the equalization fund she ranks 8th. In the case of Prince George's county, although the effect of the equalization fund is to increase the difference between the rank in need and the rank in the portion of the school burden borne by the state, the change is so slight as to be negligible.

It must be borne in mind that the apportionment of the equalization fund affects the rank in the per cent of total current expenses paid from state funds, not only of those counties which actually receive aid from the equalization fund, but of a number of other counties as well, such as Harford, Cecil, and Howard. The failure of the equalization fund to bring about completely the desirable adjustment between need and state aid in the case of Worcester, Prince George's and Kent counties, is offset by the good effects it produces in the case of the other eight counties included in the above table. The data presented are sufficient to show the soundness of the principles upon which Maryland has based her equalization fund, and the method of its distribution. The need in the case of Maryland is a further extension of the principles she has already recognized. Such an extension will be found embodied in the well-known plan devised by Mort for the State of New York, and in the plan of state aid proposed by the writer for the State of Utah.[12]

[12]Paul R. Mort, State Aid for the Public Schools of the State of New York, Part II, in (Report of) Special Joint Committee on Taxation and Retrenchment of the Legislature of the State of New York, Albany, 1925. Indem, State Support for Public Schools, New York City, 1926.

Fletcher Harper Swift, Chapter XI in Survey of Education in Utah, Bureau of Education, *Bulletin,* 1926, No. 18. Under the subtitle of, *The Remedy,* three plans for equalization are presented, pp. 478-493.

CRITICISMS OF ATTENDANCE LAWS

(Continued from Page 44)

census department which would assume the responsibility of discovering why there was not a higher ratio between these two elements.[54]

The survey of Lawrence township, Mercer county, New Jersey, found an inadequate census. It states that there is no way of checking against the complete enforcement of the attendance laws except as a permanent census record is maintained and that it was highly essential that such a census program be developed.[55] The Shreveport survey found that the principals of the schools in the city had no way of knowing what children were within their districts, and how many and which ones should legally be in school. Only a continuous school census kept by the attendance officers would make this information available. A school census was one of the first steps in the enforce-

[54]Report of the Survey of the Public-School System of Hackensack, N. Y., 1921, p. 133.

[55]Report of the Survey of the Public-School System of Lawrence township, Mercer county, N. J., 1921-1922, p. 115.

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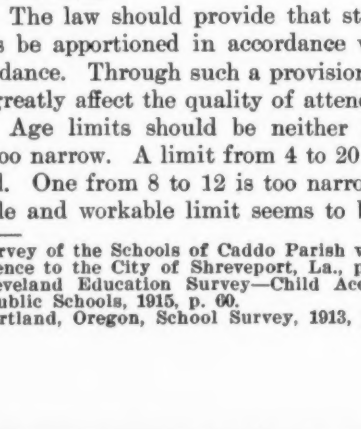

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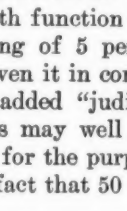

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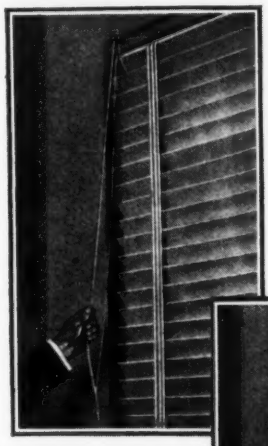

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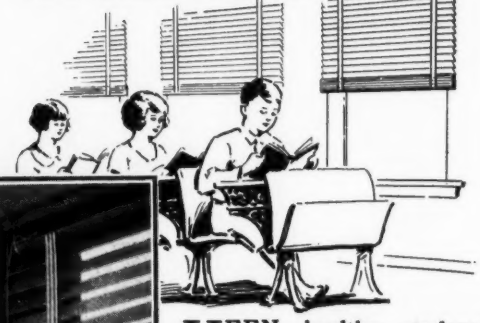

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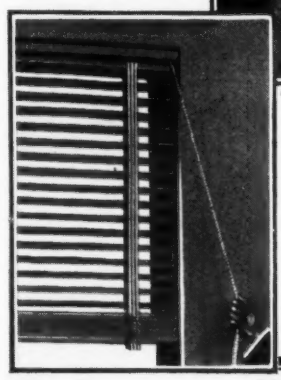

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ment of a compulsory-attendance law.[56] The Cleveland survey found that the work of the attendance division was limited almost solely to securing the regular attendance of children who had voluntarily enrolled. The division did not know how many children should be in school, who they were, or where they lived.[57] The Portland, Oregon, survey discovered an incomplete census. The school census of 1912 showed 43,121 children of school age in the district. The enrollment in the fifty-seven public schools during the spring term of 1913 was 31,265. No data were available as to the enrollment of private and parochial schools, which were about twenty-four in number.[58]

Recommendations for Remedial Legislation

Based on the above criticisms of attendance laws the following recommendations for legislation seem to be desirable if these laws are to operate in such a way as to guarantee a satisfactory education to every child in every state:

1. Children should be required to attend for the entire term that the school of the district is in session.

2. The attaining of a specified age should not be the only basis for releasing children from attendance at school. The basis for release should include the completion of a specified course of work.

3. The law should provide that state school funds be apportioned in accordance with daily attendance. Through such a provision the state can greatly affect the quality of attendance.

4. Age limits should be neither too broad nor too narrow. A limit from 4 to 20 seems too broad. One from 8 to 12 is too narrow. A desirable and workable limit seems to be 6 to 16 or 18. Moreover, the age limits of the attendance law and of the child-labor law should not be in conflict.

5. The standard desirable minimum term seems to be nine months of twenty days to a month.

6. Provisions for an adequate school census are fundamental for the enforcement of attendance laws. Such a census should include the principle of a continuous locating and identifying of persons of school age.

[56]Survey of the Schools of Caddo Parish with Special Reference to the City of Shreveport, La., p. 45.
[57]Cleveland Education Survey—Child Accounting in the Public Schools, 1915, p. 60.
[58]Portland, Oregon, School Survey, 1913, p. 288.

THE FUNCTIONS OF THE SCHOOL SUPERINTENDENT IN THEORY AND PRACTICE

(Continued from Page 46)

arrange the group of functions in such a way as to avoid all overlapping. The classification is sufficiently definite to afford a working basis so no further apology is offered for this.

It was suggested once that "teachers' meetings" be placed under supervision. That, of course, depends largely upon the individual superintendent. From personal experience of the writer and discussion of the subject with a great number of superintendents, the conclusion has been formed that the large majority of superintendents use their teachers' meetings for administrative purposes, that is, such items as duty schedules, hall and playgrounds discipline, school entertainments, instructions concerning reports, courses of study, etc., rather than pedagogical questions which would be discussed with the teachers individually.

Three of the 58 replies added "recreation" as a seventh function but since only one gave it a weighting of 5 per cent no consideration has been given it in compiling the results.

One added "judicial" as a seventh function but this may well be included under administration for the purposes of this study.

The fact that 50 of the 58 evaluated the questionary without comment as to the selection of duties or arrangement of functions seems to afford sufficient justification for its use to determine the distribution of the superintendent's time in theory and practice.

(To be continued)

THE CONSTITUTIONAL AND LEGAL BASIS OF TRANSPORTING PUPILS TO AND FROM SCHOOL

(Continued from Page 52)

be considered besides pecuniary ability and since the statute which requires these contracts be let to the lowset 'responsible' bidder authorizes the school authorities to reject any and all bids, their official expression in the matter cannot be controlled by mandamus."[9]

In this case the court defined "responsible bidder" as one being "able to respond or answer according to what is expected or demanded under the contract." A person under twenty-one years of age who has just lost a leg and has not full use of his limbs to control a transportation truck is not such a responsible person.[10]

The fact that the chairman of the transportation committee of the school committee informed a bidder that he had been appointed by the board and asked him to have his vehicles in readiness and furnish liability insurance, which he did, is not evidence that the school committee had accepted his bid even though it was the only one submitted. The chairman's language: ". . . does not mean that and even if it did the plaintiff must inform himself of the exact action of the board, since the chairman of the transportation committee acted merely as a messenger and not as an agent of the board."[11]

In this case the plaintiff had made a bid for transporting pupils for $175 per week, but the

(Concluded on Page 148)

[9]Cooper v. Townsend Supt. of Education et al. (Miss.), 108 So. 273.
[10]Bright v. Ball (Miss.), 103 Sp. 236.
[11]Lucier v. Town of Norfolk, Conn., 122 A. 711.

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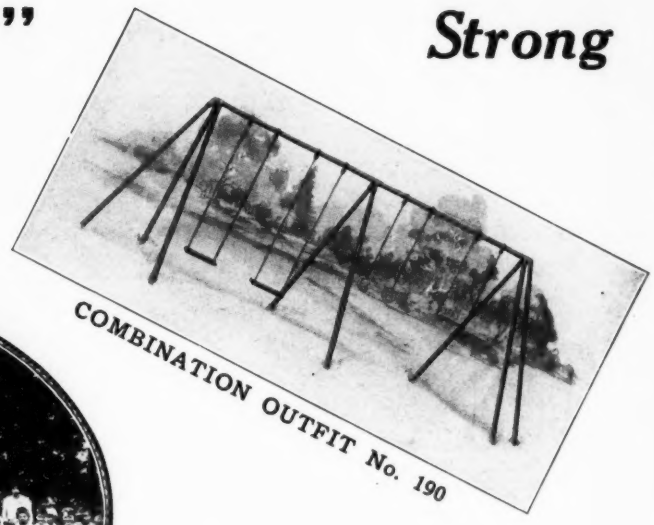

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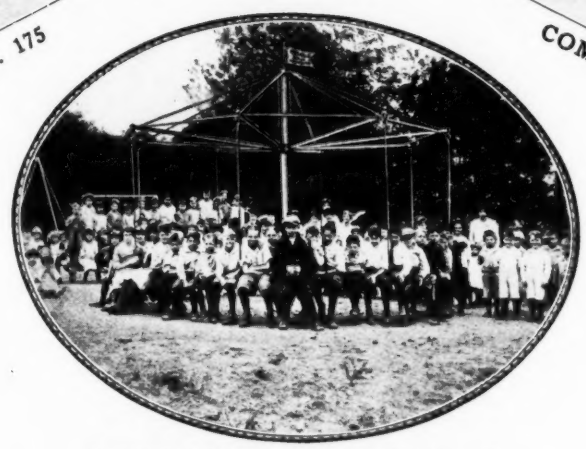

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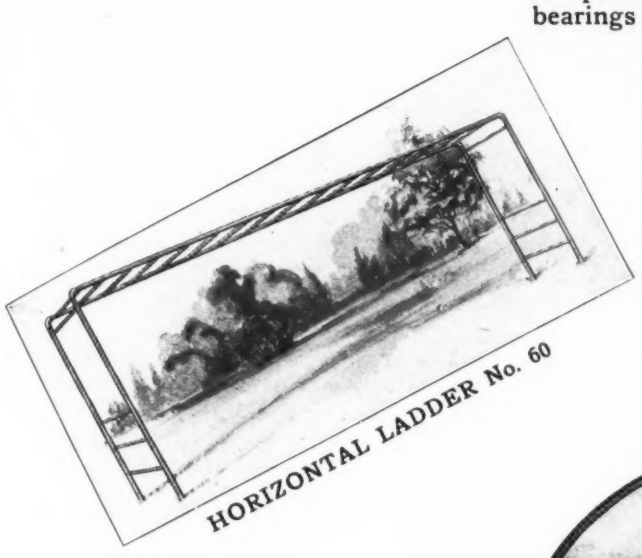

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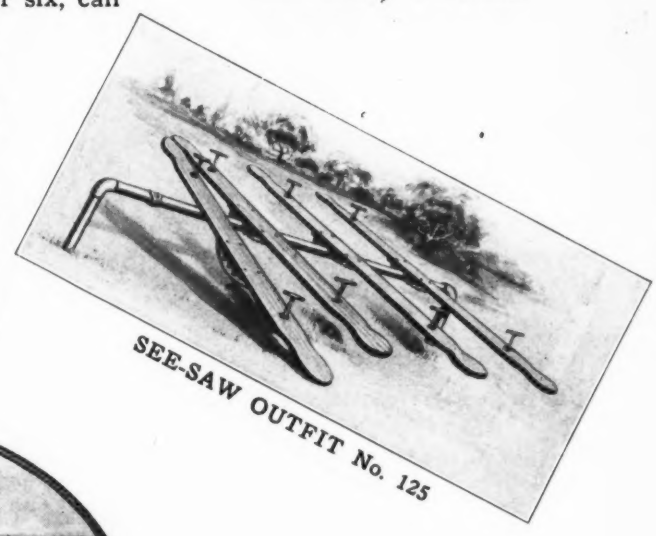

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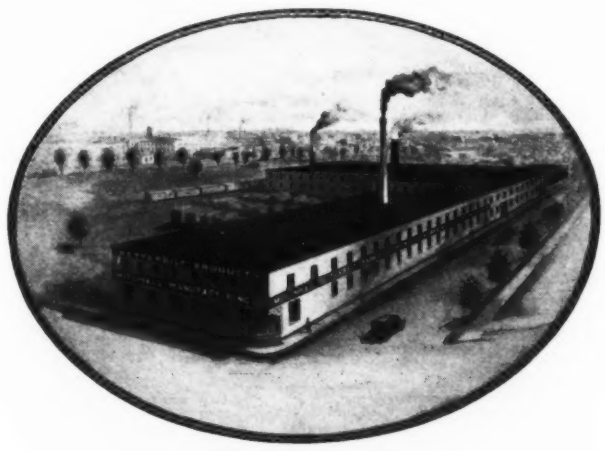
Yours very truly,
(Signed) Fred W. Green.

Note.
Mr. Green is now Governor of Michigan.



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(Concluded from Page 146)

board voted to offer him $35 per day. He sued for damages and carried his suit to the supreme court.

A contractor need not himself personally drive the bus and may employ for that purpose a minor capable of doing the work, unless there is specific provision in the statute to the contrary.[12] It is not necessary that contracts be in writing[13] but districts illegally formed cannot enter into transportation contracts.[14]

VIII—Transporting Children to Parochial Schools

A school district may not use public funds to transport pupils to a parochial school, even though the public schools in the district where the pupils reside be closed and a part of those transported are attending a public school to which the vehicle of transportation is driven. In the case of State ex rel. Van Straten v. Milquet School Treasurer,[15] a school district voted to close its schools and transport its pupils to DePere, Wisconsin, a nearby town. Two of the 30 pupils transported attended the public school and 6 more took some work there, namely, manual training or domestic science. The driver refused to sign a contract unless it specified the number of children which he was to haul. Since the contract called for the transportation of 30 pupils and only a part of the total number attended a public school, the contract was held invalid.

IX—Liability for Injuries to Children

Except in New York, school districts are not liable for injuries to children, received while being transported to and from school, through negligence of drivers or failure of the board to furnish properly equipped and guarded vehicles. Any duty of a school district to transport children to school is a public duty and their right to be so transported is a public right so that in the absence of a statute making the district liable, action may not be maintained against it for personal injury to a pupil from its neglect or furnishing of unsafe or unsuitable means of conveyance.[16]

In the New York case referred to above,[17] the board of education employed a woman to transport children to and from school in a spring wagon which was improperly guarded and inadequate in size for the number of children. It was also found to be especially unsafe for small children. One of the children riding in the wagon got her foot caught in the spokes of a wheel, after having been warned by the driver not to let her foot rattle against the spokes, and was thrown to the ground and injured. The board of education was held liable for negligence, not under the doctrine of *respondeat superior*, but under the duty of selecting a competent person as driver.

In Indiana a child was killed by a traction car when it collided with a school bus in which she was riding with other children. The father brought suit against the traction company and was allowed damages. The case was appealed and the decision reversed. Responsibility was fixed on the driver of the school bus by evidence brought before the court.[18]

The driver of the wagon furnished by the township trustee to transport children to school under the statute which requires the trustee to furnish a wagon, but does not require a parent to avail himself of the means so furnished, is the agent of the parent who entrusts his child to the driver for transportation, so that the contributory negligence of the driver in crossing a railway track bars the parent's right to recover for the child's death from injuries in collision. The chief justice dissented.

[12]Dear v. Bullock (Miss.), 107 So. 197.
[13]Board of Education et al. v. Hunt (Ga.), 126 S. E. 789.
[14]Greenlee v. Newton School Township, 104 N. E. 610, 55 Ind. Appl. 630.
[15]192 N. W. 392.
[16]Harris v. Salem School District, 57 A. 332, 72 N. H. 424.
[17]Williams v. Board of Trustees, 198 N. Y. St. 476.
[18]Union Traction Co. of Ind. v. Gaunt, 130 N. E. 136.

JUST A MOMENT, MR. SUPERINTENDENT

(Concluded from Page 72)

A teaching superintendent, nationally known, instructs a teacher's agency to write candidates in this fashion: "My dear Miss So-and-So: There is a vacancy in such-and-such-a-city. In the event that you are interested please write us and we shall gladly write 'Mr. Nationally Known.' If he feels that your qualifications and experience are suited for the position he has in mind, he will write you. Please do not apply unless you hear from him. Very truly yours."

Hiring a teacher is a two-phased transaction. On one side of the desk sits a superintendent. His position is difficult. His attitude is the outgrowth of experience fused with his own personality. On the other side of the desk sits the candidate. Her position is difficult from any and every point of view. She is being scrutinized. She is on the defensive. Her attitude is the outgrowth, usually, of inexperience fused with her own personality. The superintendent gives; the candidate receives. The superintendent judges; the candidate is being judged. In this brief and important contact the candidate is infinitely happier and the profession is better served when the superintendent has deliberately worked out and consistently carries out not an attitude in teacher employment but a technic based upon promptness, reasonable frankness, objective and thorough investigation, and, finally, upon justice tempered with consideration.

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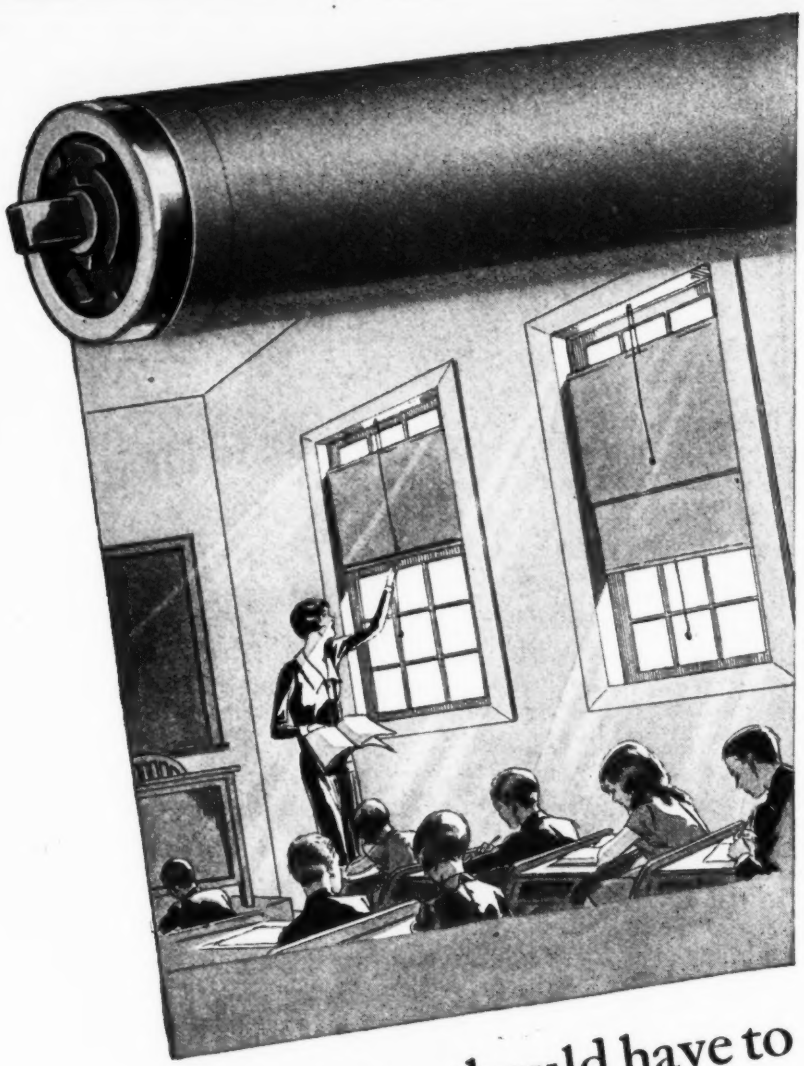

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EVERY teacher knows that nothing disturbs a class more than a stubborn window shade. Not only does a balky shade hinder classroom efficiency—it has a direct bearing upon the pupils' health.

Hartshorn Shade Rollers, because of the perfect construction of the tireless, quick-responding spring-motor—because they render years of faithful service—have earned a place in every modernly-equipped classroom.

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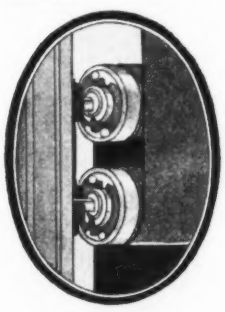
Illustrated are Hartshorn Shade Rollers installed with No. 87 double bracket—an arrangement that insures properly diffused light, and free circulation of air in the classroom.



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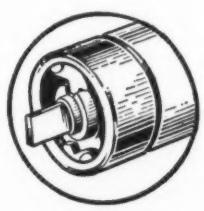
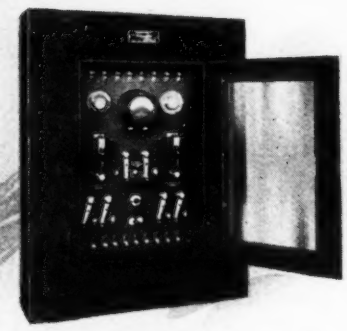


A shade is only as good as its roller

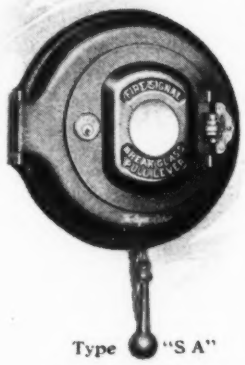
Holtzer-Cabot Signaling Systems Apparatus

Electro Mechanical Bell



Fire Alarm Control Panel in Case

"E T S" Fire Alarm Station



Type "S A"
Fire Alarm Station

Type "H"
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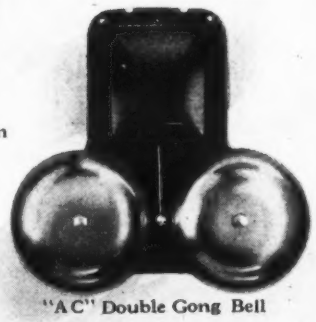
Holtzer-Cabot Fire Alarm Systems have a very high standing for their unfailing dependability.

These Fire Alarm Systems are accepted as a standard by leading architects, engineers, and school boards throughout the country.

Before deciding on a Fire Alarm System for your school, write for a descriptive brochure and let us confer with you on this important question of fire alarm protection.



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The use of steel in its manufacture is merely incidental.

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Please send by parcel-post prepaid—sample CLARIN CHAIR, finish and seat as checked:

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We will either return it or pay for it after ten days' trial.

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BOOK REVIEWS

Stories of Men and Nations

By Ethel M. Hale. Cloth, 198 pages. J. P. Lippincott Co., Philadelphia.

This is the fourth book in the Lippincott series of silent readers and provides a series of informational selections for fourth grades.

The habits and peculiarities of animals and plants, and the interesting customs of men in various countries provide the materials for the descriptive and narrative chapters. Test questions, true-and-false statements, riddles, memory tests, checking lists, and other exercises are included among the devices intended to help the teacher determine the pupils' degree of understanding. The entire work is in the direction of helping children organize their ideas and retain information. When these skills and abilities are adding to ability of reading rapidly and with comprehension, children have gone a long way toward learning how to study and to get the most out of the printed word.

The selections are written with accuracy of fact and statement in mind, and perhaps interest, except in the facts themselves, has been somewhat minimized. The vocabulary is large but easily within the ability of pupils. Illustrations and typography are excellent.

Principles of Musical Education

By James L. Mursell. Cloth, 300 pages. Published by the Macmillan Company, New York.

This book is designed to create a higher appreciation for music by presenting a comprehensive study of the methods, aims, and agencies of musical education. While the author recognizes a reasonable interest in music in this country, he contends that there is much waste because of a lack of appreciation of the true value of the art.

The present volume is divided into three parts. The first contains six chapters which deal with the musical mind, its constituents, and training. The subject of musical intelligence and feeling, as well as the measurement of musical minds, is discussed.

The three chapters of Part II deal with listening to music, performance and composition. Part III deals with the agencies of music. The six chapters here presented cover every phase of musical education from the public school to the conservatory. Suggestions are afforded here on organization, public performances, etc.

The author has limited the book quite strictly to immediate matters of method and psychology as applied to music, and has carefully avoided those generalizations and wanderings into the field of general education which characterize many professional books. It is particularly satisfying to find that he presents only those psychological principles which have been developed by observation and other factual methods, and has avoided debatable ground in general psychology and method.

Fundamentals of Business Organization and Management

By William B. Cornell and John H. MacDonald. Cloth, 480 pages. Price, $1.72. Published by American Book Company, Chicago.

This book, in teaching the fundamentals of business procedure, approaches the subject from the standpoint of what makes for a successful business career. We have seen young men engaged in keeping certain account books with reasonable efficiency, yet remain totally blind to the relation which these books bear to the whole system, and who themselves remain unfit to assume higher or broader duties.

The authors proceed upon the thought that employees must acquire an understanding of a business, as a whole, and a grasp of the basic principles upon which business is organized and managed. Thus the whole range of business enterprise, the elements of success, the starting of a new enterprise, business ownership, financing, organization, and management are dealt with. The various divisions and departments of a business undertaking are described and analyzed, and the relations which must control in order that each factor may appreciate the part he plays in the scheme of the whole.

American History Test

By H. J. Carman, T. N. Barrows, Ben D. Wood. Specimen set, including Forms A and B, manual, keys and records, price 30 cents. World Book Co., Yonkers, N. Y.

This test follows the well-established lines of the earlier tests in the Columbia Research Bureau's series, but is rather more penetrating than similar tests and requires more judgment from facts to tendencies, principles, and relations in matters political, economic, social, religious, etc. Some 200 problems are presented.

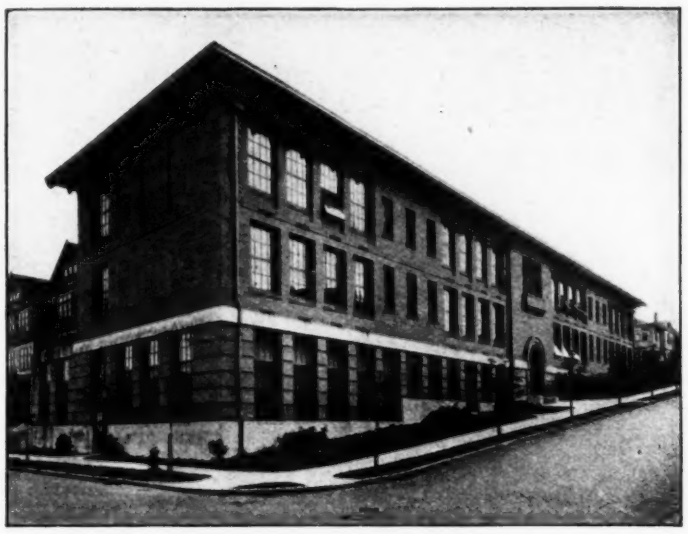
Architectural Design in Concrete

By T. P. Bennett. Cloth, quarto. 226 pages. Price, $10. Oxford University Press, New York, N. Y.

Concrete more than any other building material in use at present, has led to innovations in design and, with the exception of steel, to new developments in permanent construction. Even the most pessimistic adherent to traditional forms and accepted materials has been obliged to recognize the possibilities of concrete and to admit the virility, originality, appropriateness, and beauty of numerous concrete buildings, bridges, and other structures. The opportunity of expressing the personality of the designer no less than the spirit and characteristics of the present-day life and civilization have been no small elements which have made concrete a desirable building medium.

The present book suggests the elements of design to which concrete lends itself in an especial way. The extremely broad limits of form, ornament, texture, and color within which the architectural designer may work are put rather modestly by the author. Comparisons with other materials are wisely omitted.

The 100 plates are taken from recent work in Germany, England, France, Sweden, and the United States. Undoubtedly national taste and present trends in each country have affected the design of the buildings illustrated. Just here the continental European work reflects greater daring, less regard for the conventional, and more bizarre effects than the work in the British Isles and the United States. It would seem, however, that the American work and the British work stand out strongly as logical applications to a greater variety of building types, and that they are clearly tempered by a successful endeavor to obtain grace, richness, and simplicity.



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Civilized school-house construction now recognizes sound-deadening in floors and partitions as a necessity that is second only to light and ventilation. Quiet rooms are essential for both pupil and teacher.

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Yet every year, *many* innocent children are burned to death in schoolhouses inadequately protected against fire.

The fate of your children may now hinge on your immediate decision to use the safest, surest firescape available. Write today for a Logan engineer.

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The Footpath Way

By Annye Lewis Allison. Boards, 74 pages. Published by the author at Richmond, Va.

A teacher of English has here collected poems written by a teacher in spare moments during the school year and in the course of her travels and vacations. A book of this kind is especially interesting because it reflects a most happy spiritual and intellectual life led by a busy teacher in the midst of her daily duties and difficulties. There is in the poems a strong spiritual background, an insight into the beauties and moods of nature, and a wholesome outlook on the difficulties and problems of life.

Elementary Building Science

By Alfred Everett. Cloth, 160 pages. Price, $2.50. Oxford University Press, New York, N. Y.

The principles of chemistry and physics are here explained in terms of their application to building design and building materials. The text is a selection from material taught in a British school for builders and represents a type of work which will undoubtedly grow in the United States as our system of vocational education is developed and our specialized trades courses are still further specialized.

Storyland

By Catherine T. Bryce, Rose Lees Hardy, and Edna Turpin. Cloth bound, 288 pages. Published by Newson & Company, New York.

The American youth is to be envied for the many wonderful things that come to him which do not come to the youth of other lands. Among these wonderful things are the books which are written and illustrated for his special benefit. The little volume in hand is so attractive, so rich in interest, and so instructive that one cannot fail in appreciating the great privilege that has come to the modern child.

Old tales are lifted out of the dim past, told more attractively in language and illustration than ever before. Modern situations are not overlooked. The child is carried into picturesque scenes, delightful situations, and helpful lessons. And just as the interests and activities of children are met in text and illustration, so the real objectives of the book—to teach the essential skills of oral and silent reading and to arouse a desire to learn things from the printed page—have been carefully secured.

Supplementary Problems in Algebra

By H. L. Sackett and Mary Fitzgerald. Cloth, 110 pages. The Macmillan Co., New York City.

Teachers of long experience have here collected graded problems which they have found valuable drill in supplementing standard texts.

A First Course in Spanish

By Wm. E. Knickerbocker. Cloth, 392 pages. D. Appleton & Co., New York, N. Y.

This beginners' course for high schools combines the grammar method with the direct method and provides in eighty unit lessons simple but adequate work for the first year. Vocabulary and lessons are based upon home and school life and a trip to Spain.

The Safety Hill of Health

By Jessie I. Lummis and Williedell Schawe. Cloth bound, 96 pages. Price, 68 cents. Published by the World Book Company, Yonkers-on-Hudson, New York.

This little volume embodies a delightful collection of stories for small children in which games, plays, and household experiences tend toward cleanliness and healthful exercise. The text is well phrased and set in large type. The illustrations are in color and well done.

Building My House of Health

By Jessie I. Lummis and Williedell Schawe. Cloth bound, 141 pages. Price, 72 cents. Published by World Book Company, Hudson-on-Yonkers, New York.

This is the second of a two-book series on health instruction. Book one is entitled "The Safety Hill of Health."

Book two, like book one, contains a list of children's stories dealing with toys and animals, city and country life, outdoor and indoor life, in which the promotion of health becomes the objective. The stories are well told and handsomely illustrated.

Mechanical Drafting Handbook

By Frank R. Kepler. Paper cover, 127 pages. Published by The Bruce Publishing Company, Milwaukee, Wisconsin.

This book is intended to provide students and mechanical draftsmen with a collection of essential usages, standards, conventions, and tables based upon modern practice. The opening pages deal with the fundamental principles of mechanical drawing and lettering. Then follows a concise description of the use and care of instruments, tracing, steps in penciling, working drawings, machine drawings, etc.

Part II treats the subject of standards and conventions. Sample drawings are provided. Liberal descriptive material is furnished on laying out sheets, dimensions, notes, sections, etc. Part III concerns itself with screws and nuts, tap drills and the like. The tables are minutely worked out. Sizes and dimensions are given. The tables are further illuminated by drawings noting every essential detail.

A helpful appendix dealing with geometrical constructions is given. The book should supplement any standard text and will be found especially valuable where no printed course is followed.

Reading and Literature

By Melvin E. Haggerty. Book Two. Cloth, 556 pages. Published by the World Book Co., New York, N. Y.

The purpose of the selections presented in this volume is to develop profficiency in reading and appreciation of literature of genuine merit. The author is particularly concerned in bringing to the adolescent student material that will hold attention and at the same time provide useful instruction. There are tales taken from the writings of Robert Browning, Walter Scott, Washington Irving, Shakespeare, Dickens, Longfellow, and others. A number of selections deal with boy-scout literature, others with nature's ways and moods, done both in poetry and prose. One division of the book deals with the nation's progress. Here such writers as Abraham Lincoln, Ida M. Tarbell, Woodrow Wilson, Walter Hines Page, Franklin K. Lane, Warren G. Harding, and Aristide Briand are introduced.

There are also some splendid selections which concern themselves with men and manners. Such writers as Brand Whitlock, Irwin S. Cobb, William Allen White, John H. Finley, Jane Addams, Oliver Goldsmith, Oliver Wendell Holmes and Thomas A. Edison are heard.

While we disagree with some of the books suggested for supplementary reading, the selections presented in the book are to be entirely admired as typical of the best current literature and thoroughly adapted to intermediate-school courses.

Descriptive Geometry

By Lawrence E. Cutter. Cloth, 244 pages. Price, $2.50. The McGraw-Hill Book Company, New York, N. Y.

(Concluded on Page 154)

Shades that can be kept as clean as the windows

save their cost in years of service

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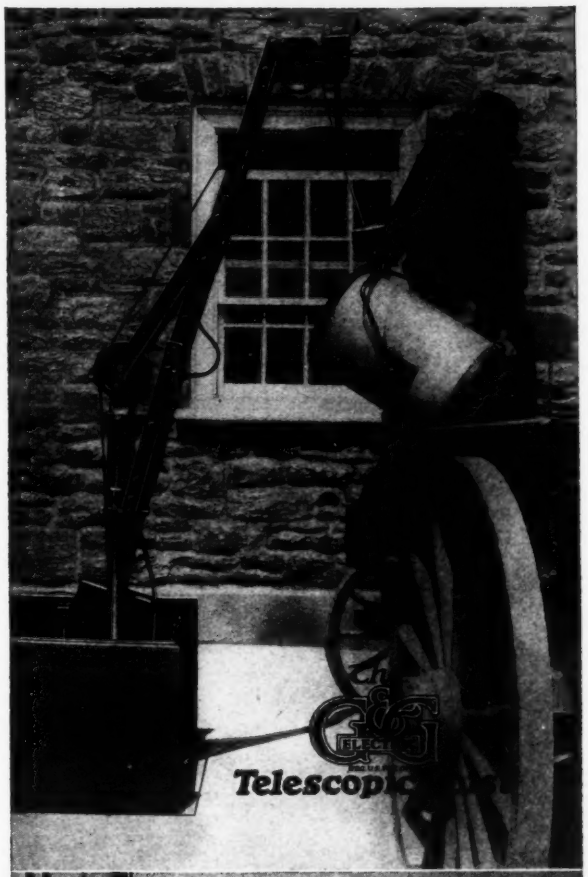

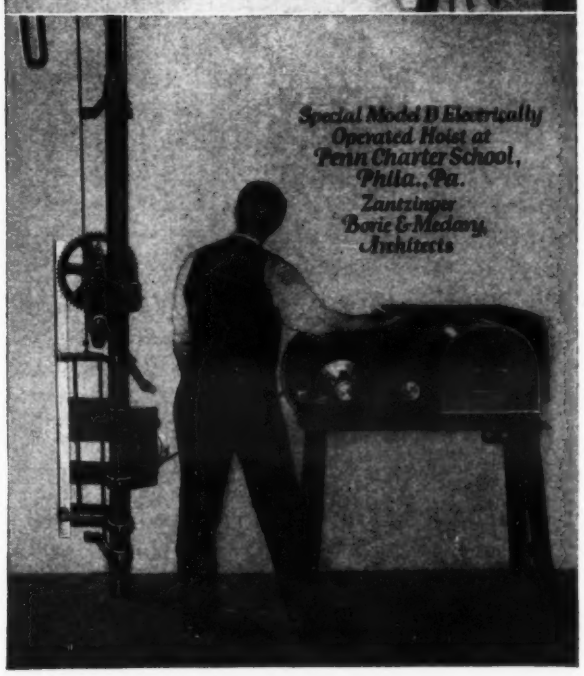

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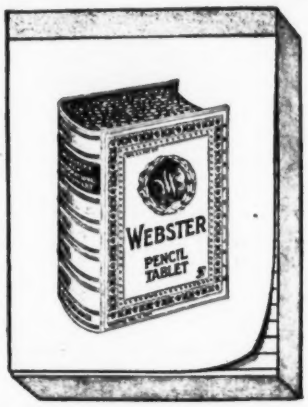

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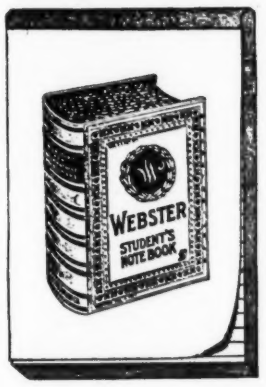

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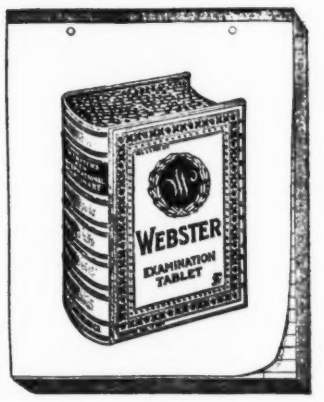

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MANUFACTURING STATIONERS HUNTINGDON, PENNSYLVANIA

(Concluded from Page 152)

A revised edition of a work first issued in 1923. The experience of four years of classroom use has been brought to bear in adding practical problems for drafting room, etc., and in making corrections.

The Eighth Wonder

Cloth, 64 pages. Illustrated. Published by the B. F. Sturtevant Co., Boston, Mass.

The story of a magnificent achievement in American engineering—the building of the Holland tunnel under the Hudson River from New York City to New Jersey.

Wonders of Science

Selected and Arranged by Eva March Tappan. School Edition. Cloth, 257 pages. Houghton Mifflin Co., New York, N. Y.

Children are fascinated by true stories concerning the world in which we live. This is true especially when the dry, barren facts which scientists are inclined to state in their peculiar jargon are told in a form and in language that makes strange, unusual happenings real, that brings distant stars and their motion close to us, and that enlarges microscopic organisms so that we may know their life stories. The present book is a collection of brief extracts from the writings of scientists and others and presents facts and observations concerning the stars, mountains, glaciers, birds, and insects. A number of chapters are devoted to the uses which man has made of the forces of nature in machines and devices like radio, water-power plants, etc., Just one story mars the author's general plan of limiting the selection to facts and direct observation of facts. It is a highly fantastic and imaginary description of the beginning and formation of a nebula, and it rather leaves the impression that the author speaks of a fact rather than theorizing as he necessarily does.

A Schoolroom Temperature Chart

By Thomas D. Wood and Ethel M. Hendricksen, Teachers College, New York, N. Y. Public School Publishing Co., Bloomington, Ill.

The chart is designed for use during the months when school buildings are heated, and is to be kept either by the teacher or the pupils, who may in turn be assigned the problem of reading the thermometer and recording the temperature.

The chart provides spaces for indicating the temperature of the schoolroom at the opening of the session and every hour following, during each school day for a week, when the room is heated. A dot is placed on the chart to show just what the temperature of the room is at the time of recording. In filing the chart, the dots are to be connected by lines to make a plot or curve of the varying temperature. A temperature above 68 degrees is dangerous to health and should be plotted in red.

The careful recording of temperature as suggested by the chart would undoubtedly remove the dangers of overheating rooms. The authors are particularly anxious to avoid overheating because it is one of the most serious factors contributing to poor ventilation and bad air conditions. Whether a teacher with thirty or forty children in charge can devote any of her time to record making is a question not easily answered. It would seem that recent pronouncements of the N.E.A. urge that teachers be relieved of their additional administrative duties while engaged in active classroom teaching. Would not an automatic mechanical device, properly located and properly set, avoid this kind of additional burden upon the teacher?

PUBLICATIONS RECEIVED

Find It Yourself. By Elizabeth Scripture and Margaret R. Greer. Students' Edition, paper, 43 pages; Teachers' Edition, paper, 62 pages. Published by H. W. Wilson Co., 958 University Ave., New York City. A brief course in the use of books and libraries under the contract system. In adapting the contract system of assignment to library lessons the librarian is enabled to conduct a class of instruction and to carry on the necessary library routine at the same time. The booklet contains tests worked out on the latest approved methods of testing.

Answers to Arithmetic Practice. Grades three and four. By F. M. McMurry and C. B. Benson. Grade three, paper, 104 pages; grade four, paper, 132 pages. Published by the Macmillan Company, New York City. Contains a number of practice exercises in the fundamental operations of arithmetic for use in grades three and four. The exercises are intended to overcome weaknesses and to stimulate thought on the part of the student.

Teachers' Manual for Child's First Book in Reading. By Margaret J. McElroy. Paper, 40 pages. Published by American Book Co., New York, Chicago. This book offers an outline of 27 lessons for the teacher who must teach the child just beginning to read. The manual offers detailed lesson plans, a vocabulary, language work, reading work, and ear training for each lesson, together with the teaching method to be employed. In each case, the lesson plans are intended for the convenience of the teacher and they contain suggestions for correlated school activities. The work is of such a character that the average class may complete the course in five weeks. There is an alphabetical list of vocabulary and a guide to enunciation.

Critical Analysis of Student Persistence at Iowa State University. By R. W. Tallman. Bulletin No. 1, Series No. 129, April, 1927. Issued by the University of Iowa, Iowa City. The present study was undertaken with a view of determining what actually happened in the way of persistence. In connection with the study it was the purpose to record the academic history of the freshman class of a given year and to retrace the record of a graduating class of a given year. With the information gained in both these methods, it is possible to supply desirable data which are not gained directly in either. The entire academic history of the freshman class of 1920-21 of the state university was recorded, as were those of all students graduated from the university, with the exception of those with degrees, during the year 1924. The results showed the persistence of graduates in terms of years elapsed between high school and college graduation, and form the basis for predicting the approximate ultimate attendance of the freshman group and the interval of time involved.

Improvement of Instruction in Arithmetic. By F. P. O'Brien. Bulletin No. 4, Oct., 1927. Issued by the Bureau of Research, University of Kansas, Lawrence. This booklet deals with the technic and results of a school experiment pertaining to the improvement of instruction in arithmetic in the two upper elementary grades and also with the bearing of the subject upon achievement in high-school mathematics. The pamphlet discusses the nature and scope of the problem, the diagnosis of the situation, the plan of procedure for improving instruction results, and the outcome of the experiment. The diagnosis pertained to such considerations as mental ability, previous schooling, achievement in various phases of the subject, and types of errors or difficulties which characterized the pupils' work. The study disclosed rather marked deficiencies on the part of students whose scores were compared with standard scores in the mechanical computations as well as in problem-solving difficulties. It was noted that students who received a majority of their elementary schooling in rural schools made lower average scores in several of the achievement tests. This fact constitutes a special problem of instruction for the high-school teacher of mathematics.

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PAMPHLET PUBLICATIONS RECEIVED

Laboratory Layouts for High-School Sciences. By A. C. Monahan. Paper, 31 pages. Bulletin No. 22, 1927. Issued by the United States Bureau of Education. The present pamphlet outlines the required equipment for chemistry, physics, biology, and general science. It discusses the rooms necessary for science classes, laboratory furniture, Lincoln School special furniture, general equipment, and apparatus and equipment for physics, chemistry, biology, and general science.

Occupational Groups and Child Development. By Stuart M. Stoke. Price, $1. Issued by the Harvard University Press, Cambridge, Mass. This pamphlet gives the results of a study of the mental and physical growth of children in relation to the occupational grouping of parents and was undertaken with the cooperation of the psycho-educational clinic of the Graduate School of Education of Harvard University.

The social grouping employed in this study was based upon the parental occupations which are divided upon the basis of Taussig's five noncompeting groups—I, unskilled labor; II, semiskilled labor; III, skilled labor; IV, clerical and small business, and V, professional and large-scale business. The children in the study were compared as to the intelligence quotients, weight, malnutrition, and anatomic maturity. In the study the intelligence quotients were divided into five groups, while measures of height, weight, and anatomic maturity were split into quintiles. Two methods of classifying undernourished children were used—one describing a child seven per cent under average weight for height, and the other using a basis of ten per cent underweight for height. The children used were part of a larger group studied by the clinic of the Harvard Graduate School and were selected from those of North European stock. All of the children were given intelligence as well as group tests and care was taken to eliminate the effect of race, sex, and age upon measurements by selection rather than by mathematical methods.

Freshman Mortality. By J. Edward Allen. Issued by the state education department, Raleigh, N. C. The author points out that a recent study of the southern colleges and secondary schools shows that practically half of all freshman in the state universities and colleges for men fail in one or more subjects; and that among these freshman approximately one sixth of all college hours are failed. The present study seeks the reason for freshman mortality in educational institutions and to point the way to a remedy for the situation. Among the reasons given for the situation are the lack of knowledge of how to study, the changing status of the high school, poor instruction in high school, crowded curricula, poorly trained teachers, character of the student, parental training, financial embarrassment, and ill health.

Among the improvements suggested are the following: High schools should make a sharp distinction between graduation and college entrance. Many students are qualified for high-school work, who are in no sense fitted for college work; summer schools for teachers should offer effective preparation for teachers in teaching how to study. It is the most difficult part of teaching and as affecting future habits is most important criteria in use in the selection of freshmen in the colleges should include determination of ability to impart knowledge effectively, manage a classroom efficiently and use their personalities to advantage in contact with students; admission to college should be determined on the basis of the certificates from the secondary school, and also on the basis of ability to pass an intelligence test, and a physical examination; adequate specific training for the teaching of each subject should be required of each high-school teacher, in addition to the general requirements; the attention given to the physical welfare of students in educational institutions is susceptible to improvement.

Age-Grade and Progress Indices for the Public Elementary Schools of Iowa. By Gustaf Freden. Bulletin No. 2, April, 1927. Issued by the University of Iowa, Iowa City. The study gives the results of a study of pupil progress in the state of Iowa and is one of a series of studies in the field of child accounting begun under the direction of the Bureau of Educational Research and the Service of the University. The study serves two important purposes: It make available to school administrators a detailed and reliable analysis of pupil progress; it serves to drive home to schoolmen the necessity of a more adequate child-accounting system in the state.

From the results of the study, it appears that the pupils on the average are too young when entering grade 1. It was revealed that 48 per cent of the children in the first grade were 5 years old or under, and this appears to be a contributing cause to the large number of failures that occur in the first grade.

An analysis of age-grade progress shows that the annual-promotion schools have 8.2 per cent of their children two or more years over age, and 3.8 per cent two or more years under age. The corresponding figures for the semiannual-promotion schools are 6.5 and 4.3. The percentages are high enough to warrant that these unusually old or young children be given special study and instruction.

The fact that 23.3 per cent of the pupils make slow progress and only 3.1 per cent progress rapidly indicates that individual differences are not cared for as well as might be. Subject matter should be made to fit the pupils, and supervised study, adequate motivation, and accurate records are a few suggestive remedies.

The study shows that the girls make better progress in the grades than do the boys and this may suggest that the courses are better suited to the girls, that methods of instruction appeal less to the boys, or that a more diversified curricula are needed.

The value of semiannual-promotion schools is indicated by reason of the number of semesters gained as compared with the number lost, and the number of children accelerated as compared with the number retarded. Frequent promotions will eliminate some of the rigidity so prevalent in the schools and the additional amount of work involved is more than repaid by the benefit derived by the children.

On the whole, the study reveals that the pupil-progress situation in the elementary schools of Iowa is in need of close attention. The study should go deeper and should be more extensive. Each superintendent should analyze the progress situation in his own system and should undertake frequent age-grade and progress studies to make sure that the pupil-progress situation is in a healthy condition.

Creative Activities in the First Grade. By Lola Hughes. Paper, 27 pages. Published by the Milwaukee Normal School, Milwaukee, Wis. The pamphlet shows illustrations of creative work in birds, flowers, rhythm and song, poetry, dramatization, and building.

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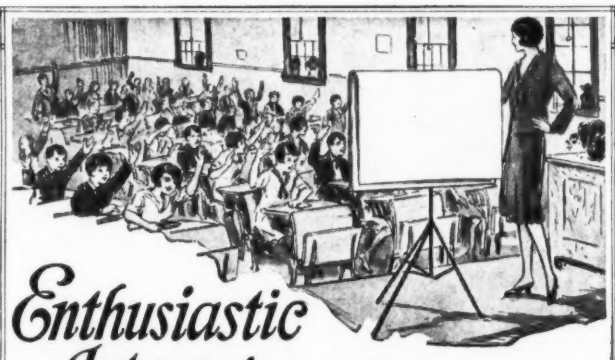

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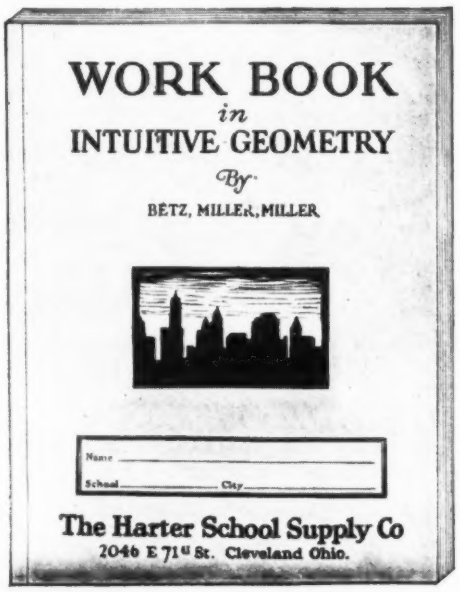

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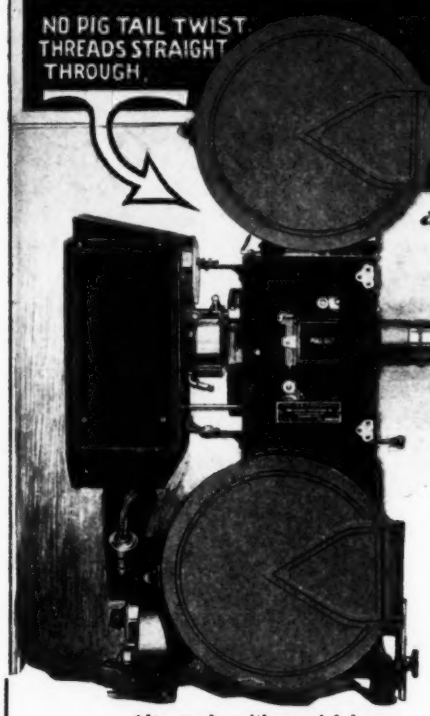

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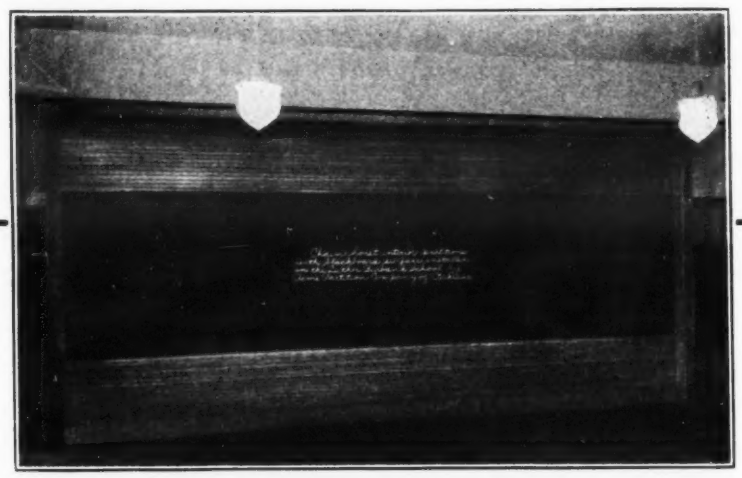

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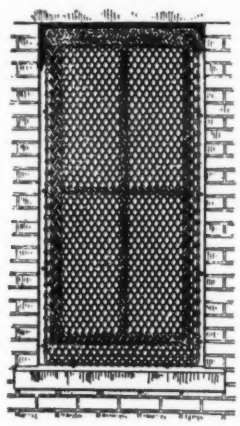

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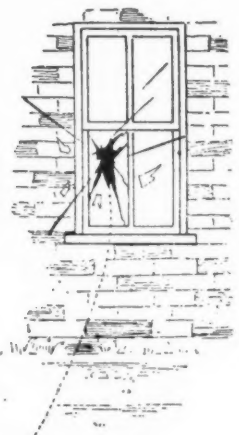

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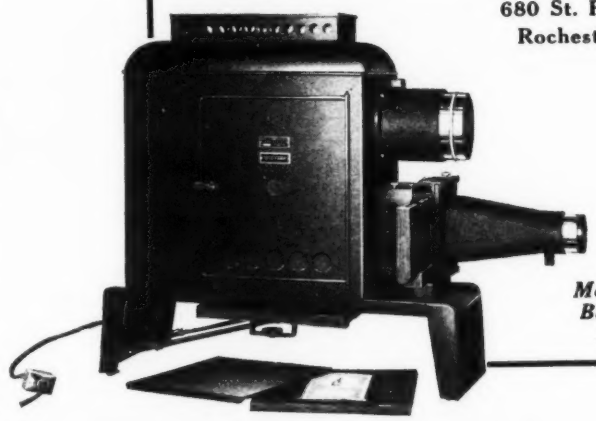

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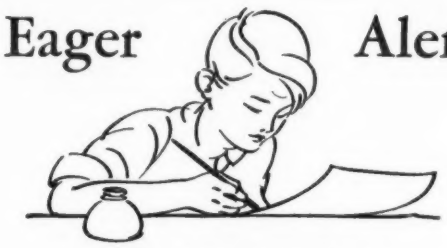

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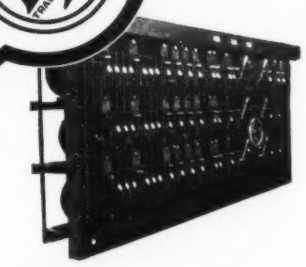

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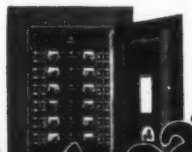

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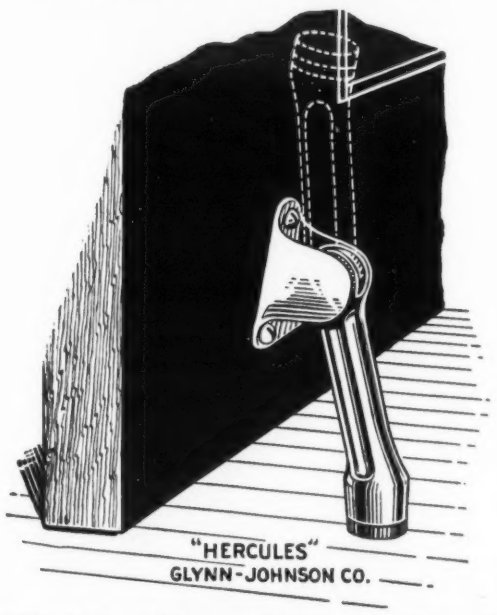

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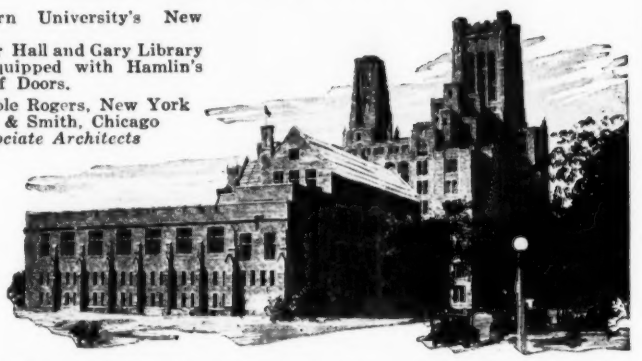

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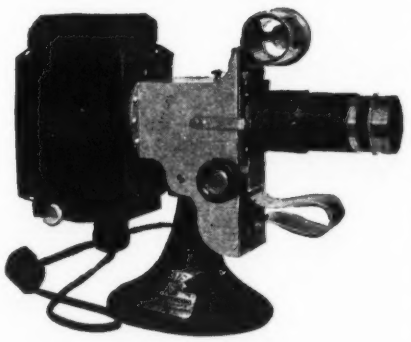

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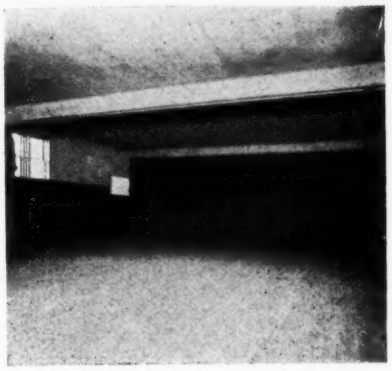

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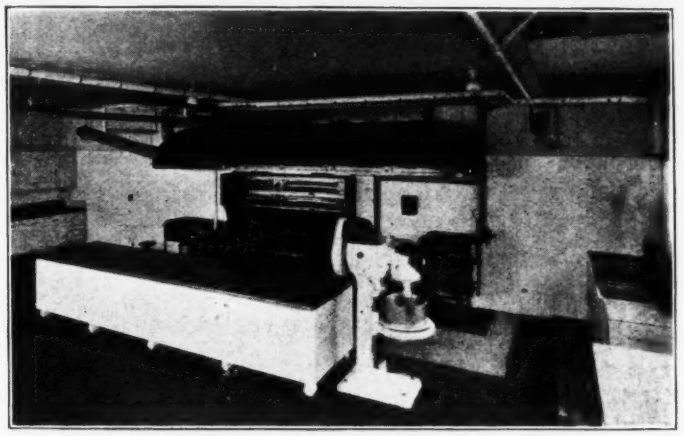

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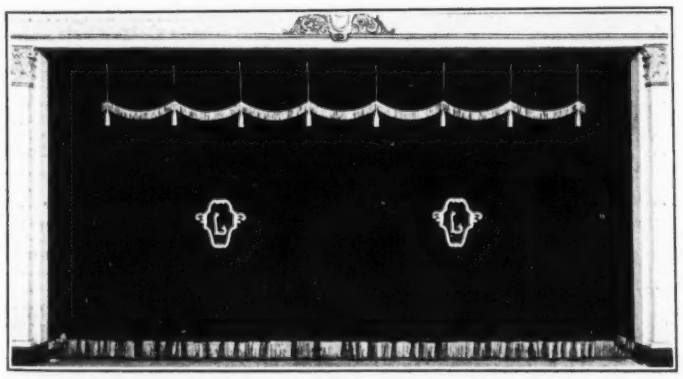

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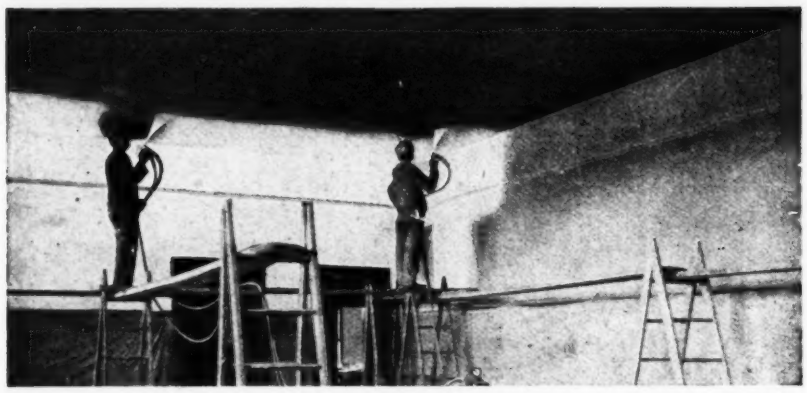

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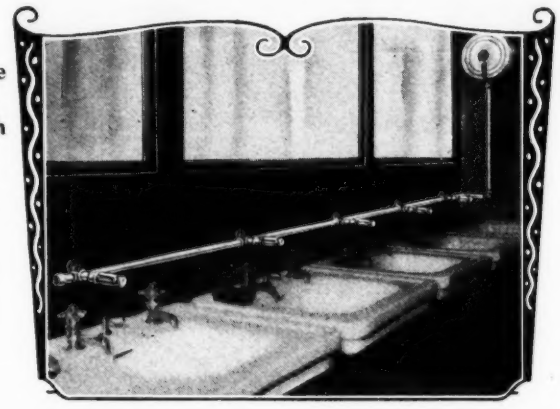

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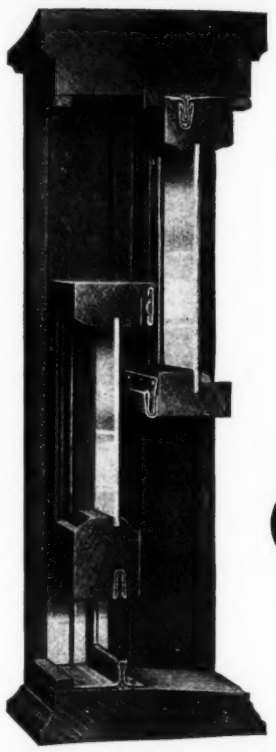

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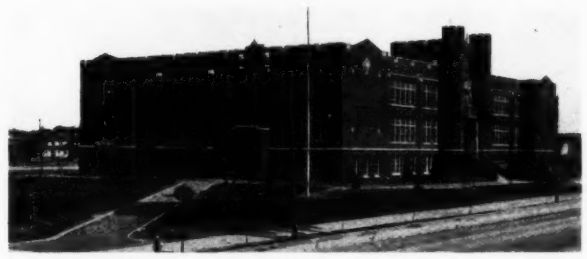

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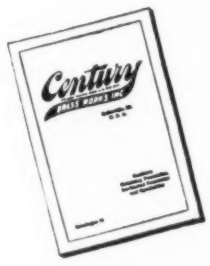

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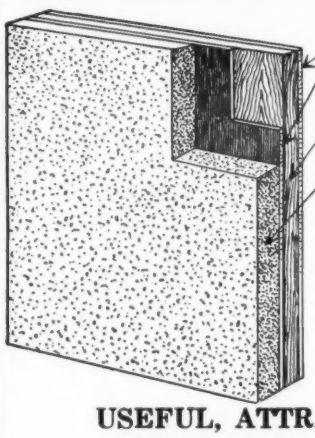

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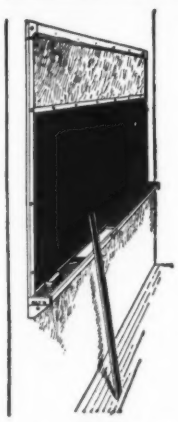

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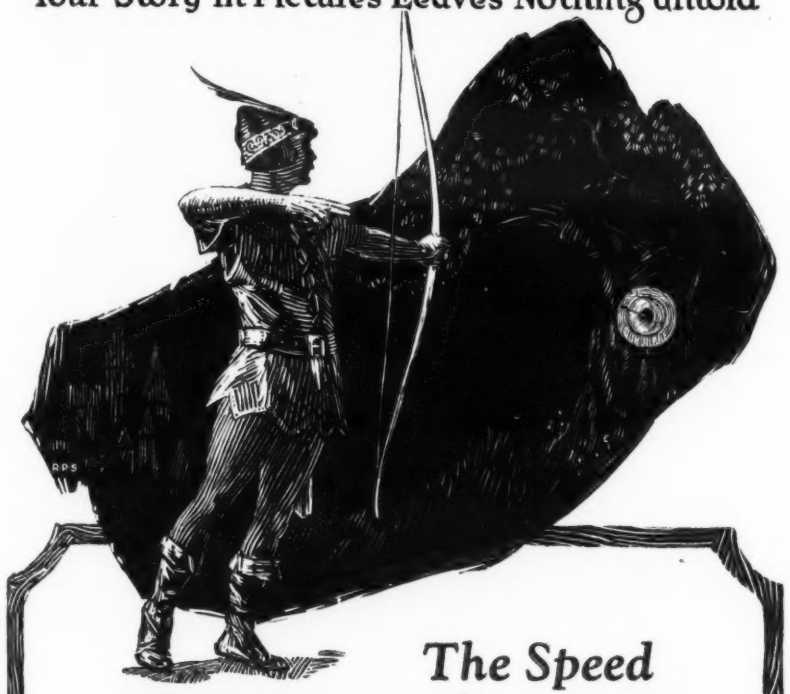

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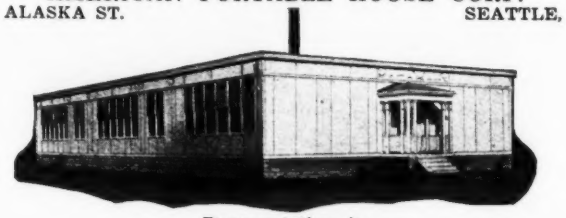

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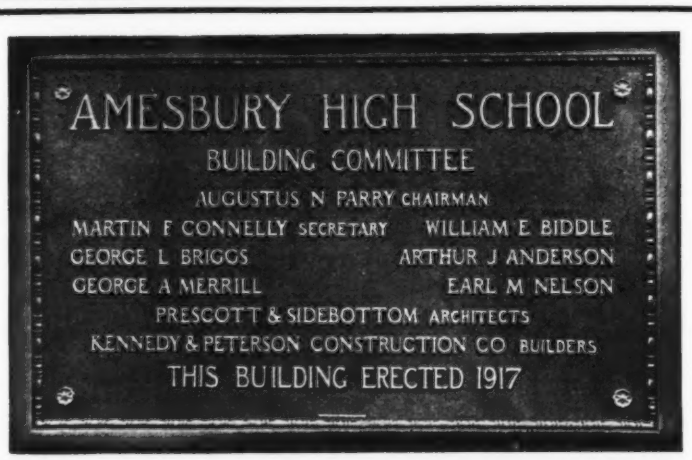

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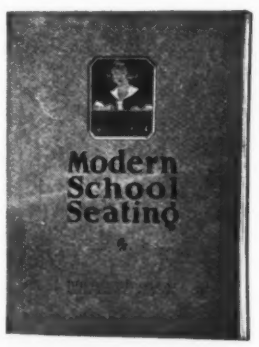

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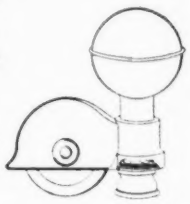

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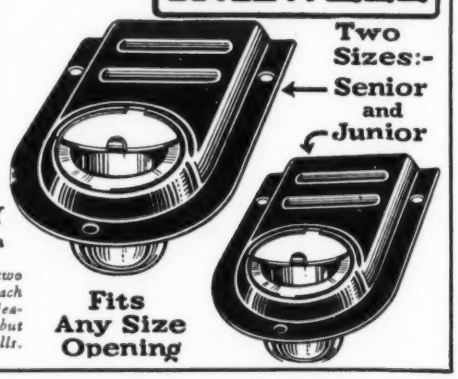

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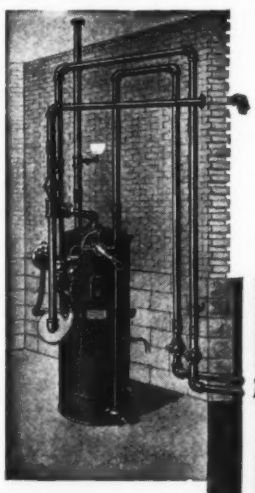

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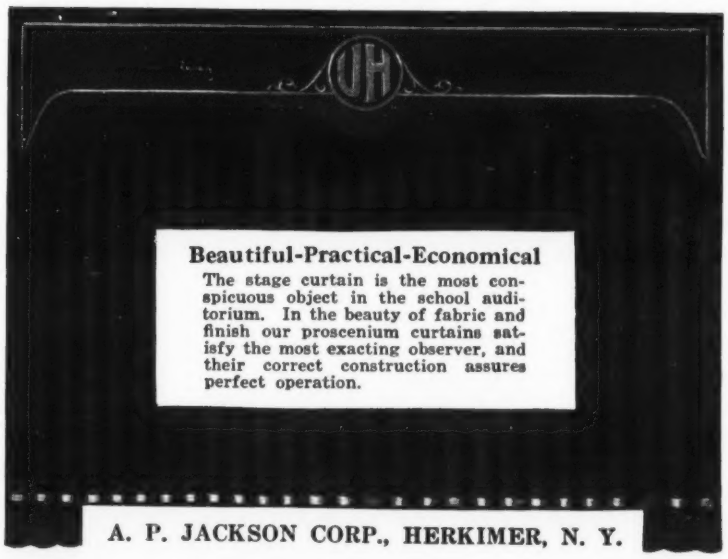
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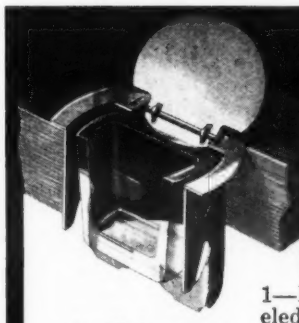

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For School Bands. Catalog, colored sketches, and samples mailed free. DeMoulin Bros. & Co., 1011-1100 South Fourth St., Greenville, Ill.

Five Nibroc Paper Towels will drink a glass of water. Nibrocs are camels for water.

Nibroc Provides Pupils with Clean Individual Towels

—and helps prevent the spreading of children's ills

Try to pull a Nibroc Towel apart. Note how it resists tearing.

Shake some ink from your fountain pen onto a Nibroc Towel. The Nibroc absorbs it instantly.

Dip a Nibroc Towel into a basin of water. Note how quickly the water creeps upwards.

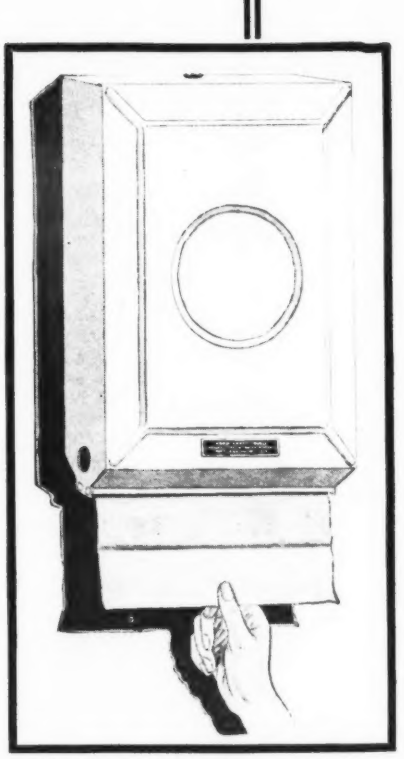
Rub a Nibroc Towel on the sleeve of your blue suit. Note the absence of lint or fuzz.

NIBROCS assure complete sanitation and help prevent the spreading of contagious diseases among school children.

Nibroc Paper Towels are a great convenience where large numbers of pupils use the washroom at the same time. They encourage cleanliness.

School superintendents have found Nibroc protection and economical service a decidedly worthwhile factor in lowering the maintenance cost of their washrooms.

Make your own tests with a generous free sample package of Nibrocs. Send for them now.



The Nibroc Cabinet is a time saver. It holds twice as many towels as most cabinets; therefore it requires but half the attention. Measuring 10½x15x3¾ inches, it is furnished in clean white enamel, or in various colors to match your woodwork. It is easily attached to washroom walls.

BROWN COMPANY

PORTLAND *founded* 1852 MAINE

Boston Pittsburgh Chicago St. Louis
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School Board Journal

DIRECTORY OF EQUIPMENT AND SUPPLIES

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms.

ACOUSTICS
Cabot, Inc., Samuel
Celotex Company, The
ADJUSTABLE SHELVING
Garden City Plating & Mfg. Co.
AIR CONDITIONING
American Blower Company
Buckeye Blower Company
Buffalo Forge Company
Nelson Corporation, The Herman
AIR WASHERS
American Blower Company
Buffalo Forge Company
ALUMINUM WARE
Cleveland Range Company, The
Permalium Products Co., The
ARCHITECTS
(See Schoolhouse Architects' Directory)
ASH HOISTS
Gillis & Geoghegan
AUDITORIUM SEATING
American Seating Company
Arlington Seating Company
Derby & Company, Inc., P.
Heywood-Wakefield Co.
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Peabody School Furniture Co.
Rowles Co., E. W. A.
Standard Mfg. Company
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Detroit Steel Products Company
BASEMENT WINDOWS, STEEL
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American City Magazine, The
Beckley-Cardy Company
Bruce Publishing Co.
Gregg Publishing Company
Harter School Supply Company
Houghton, Mifflin Co.
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Barrett Company, The
Detroit Steel Products Company
Duriron Co., Inc., The
Indiana Limestone Company
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Sani Products Co., The
Standard Gas Equipment Corp.
Van Range Co., John
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Pick & Co., Albert
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Miller Company, The
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LOCKS—KEYLESS
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Medart Mfg. Co., Fred
Mitchell Manufacturing Co.
Narragansett Machine Company
Paradise Playground Equip. Co.
Potter Manufacturing Corp.
PLAYGROUND ENCLOSURES
Anchor Post Fence Company

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ON THE THRESHOLD OF A NEW AMERICAN COMMUNITY

THE two short centuries since America was a fringe of colonies struggling for existence upon a wild and troubled Atlantic seaboard have seen a territorial expansion, industrial growth, and social development which in magnitude and far reaching influence dwarf into insignificance any comparable experience in human history. The mere thought of a handful of sturdy pioneers, struggling against seemingly insurmountable odds in some strange and far away land, growing within the span of three lives into a united people of a hundred millions with a true nationality, staggers the imagination. That, that people should assume a position of absolute world supremacy in industry and a dominant position in international political affairs seems almost grotesque—it would be were it not so.

Let us stop and consider the consequence of America's almost explosive growth. Let us consider the phases of that growth which, aside from purely individual and purely family affairs, come closest to our personal interests and personal experiences. Let us consider American Community Life, that all important phase which covers the interrelation and common problem of a group of people living together under common bonds of geography, government and interest.

That American Community Life has in some ways suffered as the natural result of a meteoric national development cannot be denied. Relieved by a few outstanding exceptions which only serve to emphasize the general state, the American Community stands today as an example of unguided, and for the most part uncontrolled development. Monumental of American enterprise and spirit 'though it is, we have at last come to the realization that the American Community lacks the harmony of expression and unity of purpose which its all important position and true significance merits, and with this new awakening has come a conception of greater possibilities and greater responsibilities.

If we would take any part in the reconstruction of American Community Life which has at last taken hold, we must turn from the abstract to matters of cold fact. We must not turn from ideals and lofty purposes but rather, keeping them always in mind, must work with more tangible materials to gain our end. We must face problems as they are and solve them in honest practical ways, using for our guide the knowledge gathered from all kindred experiences. We must play fair and square with our fellow men, willing to exchange ideas and experiences that all communities may benefit from common knowledge.

As the center of community interest, the public building becomes at once the center of our attention. It is the one tangible symbol of an ideal. It is the one point where utilitarian and inspirational aspects find a common focus. It is the one expression of solidity, progress, ambition and lofty purpose which the community possesses. In spirit and in fact, it *is* the community.

To each of us falls some share in the development of this new and larger program. To each of us come new and greater responsibilities according to our qualifications and our interests. To *Modern Public Buildings* comes the call to furnish a medium for the exchange of thought, ideas, and experiences in the solution of the problems of construction, equipment, and maintenance which confront and are common to all modern public buildings; a medium through which the various groups may acquaint each other with progress and development; a medium dealing largely in technical subjects, yet avoiding the mathematic detail of a strictly engineering problem.

BRUCE-MILWAUKEE

With the January issue the Bruce Publication formerly known as "Modern Schools" changed its name, broadened its scope, and became dedicated to a greater service.

Continuing its work in the great field of modern schools, *Modern Public Buildings* adds to that firm foundation the equally important, equally interesting, and closely associated problems of other community buildings.

Every school man will find the new and larger Bruce Publication of increased interest because it will bring him into closer touch with his associates in the great field of public service.

Modern Public Buildings

CONSTRUCTION — EQUIPMENT — MAINTENANCE

The Bruce Publishing Company, Publishers

Chicago MILWAUKEE New York

School Board Journal

DIRECTORY OF EQUIPMENT AND SUPPLIES

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Century Brass Works, Inc.
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Clow & Sons, James B.
Hoffmann & Billings Mfg. Co.
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Vogel Company, Joseph A.

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Cleveland Range Company, The

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ROOFING
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American Abrasive Metals Co.

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SASH, STEEL
Detroit Steel Products Company
Lupton's Sons Co., David

SASH, VENTILATING
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Standard Electric Time Company

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Finnell System, The

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Clow & Sons, James B.
Hoffmann & Billings Mfg. Co.

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DeVilbiss Mfg. Co., The

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Jackson Corp, A. P.
Kansas City Scenic Co.
Lee Lash Studios
Novelty Scenic Studios
Tiffin Scenic Studios
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Universal Scenic Studios, Inc.

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American Abrasive Metals Co.
American Blue Stone Company
Norton Company
Safety Stair Tread Co., The

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Blair Company, J. C.

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STEEL SASHES
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Durabilt Steel Locker Co.
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Angle Steel Stool Company

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Rinehimer Bros. Mfg. Co.

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Victor Talking Machine Co.

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Teacher Agencies Directory

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Holtzer-Cabot Electric Company
Standard Electric Time Company

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Buffalo Forge Company
Johnson Service Company

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Bay West Paper Company
Brown Company
National Paper Products Co.
Palmer Co., The

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Mills Company, The
Sanymetal Products Company
Structural Slate Company
Vitrolite Company
Weis Mfg. Co., Henry

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Invincible Vac. Cleaner Mfg. Co.
Spencer Turbine Company, The

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Clow & Sons, James B.

VENETIAN BLINDS
Hough Shade Corporation

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Buckeye Blower Company
Buffalo Forge Company
Dunham Company, C. A.
Milwaukee Corrugating Co.
Nelson Corp., The Herman
Peerless Unit Vent. Co., Inc.
Sturtevant Company, B. F.

VENTILATORS
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Globe Ventilator Company
Lupton's Sons Co., David

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Evans, W. L.
K-M Supply Company
Wilson Corp., Jas. G.

WASTE PAPER BASKETS
National Vulcanized Fibre Co.

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Beaton & Caldwell Co., The	142
Beck & Sons Co., The Wm.	170
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Berger Mfg. Company	107
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Bonded Floors Co., Inc.	75
Bradley Wash Fountain Co.	162
Brown Company	174
Buckeye Blower Co.	129
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Century Brass Works, Inc.	167
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Cleveland Range Company, The	165
Clow & Sons, James B.	133
Columbia Mills, Inc.	7
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Continental Chemical Corp.	139
Copper & Brass Research Ass'n.	13
Cram Company, The George F.	159
Cyclone Fence Company	77
Dayton Safety Ladder Co., The	134
Denver Fire Clay Company	148
Derby & Company, Inc., P.	18
Detroit Steel Products Co.	145
DeVilbiss Mfg. Company, The	166
Dougherty & Sons, Inc., W. F.	167
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Gillis & Geoghegan, The	153
Glynn-Johnson Corporation	163
Goes Lithographing Company	168
Graham Brothers	92
Graybar Electric Co., Inc.	109
Gregg Publishing Company	158
Gunn Furniture Co.	140
Hamlin, Irving	164
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Heggie Simplex Boiler Co.	9
Heywood-Wakefield Co.	89
Hill Standard Company	33
Hillyard Chemical Company	98
Hockaday, Inc.	141
Hoffmann & Billings Mfg. Co.	162
Holden Patent Book Cover Co.	91
Holmes Projector Company	160
Holophane Glass Company	79
Holtzer-Cabot Electric Co.	150
Hough Shade Corporation	146
Houghton, Mifflin Company	159
Huntington Laboratories, Inc., The	130
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Kansas City Scenic Company	170
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Miller Keyless Lock Co., The J. B.	172
Miller Company, The	12
Milwaukee Corrugating Co.	81
Milwaukee Dustless Brush Co.	169
Mitchell Manufacturing Co.	147
Murdock Mfg. & Supply Co., The	32
Narragansett Machine Co.	163
Nash Engineering Co.	34
National Ass'n of Marble Dealers	80
National Crayon Company	30
National Paper Products Co.	143
National School Equipment Co.	27
National Vulcanized Fibre Co.	28
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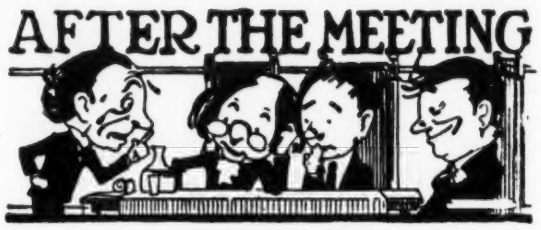


Itemizing the Bill

Mr. H. G. Lehrbach, business manager of the Pasadena schools, recently received a bill from a local garage man for the cleaning of one of the school department cars. According to the Los Angeles School Journal, the bill read as follows:

"For steam cleaning of motor and chassis and washing body of car, Order No. 378¼, $4.50."

It was approved by Business Manager Henry G. Lehrbach of the schools, the board of education, and a warrant was drawn in payment of the bill. Mark Keppel, county superintendent of schools, refused to pay the warrant, stating the bill should have been itemized.

Mr. Lehrbach was perplexed. He couldn't see how the bill could be itemized, but sent it to Mr. Cole, the garage man, and urged him to do his best. This was the result.

"Materials: Non-alkali soap (green), 8c; L. L. gas for making steam, 23c; kerosene No. 1A. White, 4c; use of chamois and cloths, 15c; use of sponges, 3c; 50 gallons city water (Villa reservoir) 50c; bone labor, two colored men manipulating hose and tools, $3.47; total, $4.50.

"Labor estimated: 175 strokes to the right, 126 strokes to the left, 10¼ strokes circular, 300 jabs direction not noted; no estimated profit or charge for typewriter."

The revised bill was presented with the new warrant and it was approved by Mr. Keppel and paid to Mr. Cole.

Gleaned from School Examinations

They march with their faces in front of them.
And heard the shot fired round the world.
Men may rise on stepping stones of their dead cells to higher things.
A writ of disposition is served on an official when he is not strict enough in his duty.
Having a head full of beautiful stone gray hair.
National bank notes are issued by the national banks, under the supervision of the national government.
They will ride on the ferry's wheel.
The onlyless country I know of.
I love the rocks and rails.
I put a bed of cannons round there.
Chaos (Coos) County.

A vacation letter from a pupil to a teacher closes with, "My remains to you."

Almost Incredible

The professor returned home late at night and when he opened the door of his bedroom, he heard a noise under the bed.

"Who is there?" he demanded.

"Nobody," came a voice from under the bed.

"Gosh!" ejaculated the great man. "And I could swear that there was somebody under the bed."

The Explanation

Teacher: "Can any of you tell me why one part of the church is called the altar?"

Hopeful Little Miss: "Please, teacher, because it's where girls change their names."

Going, Going——

She was a professor's wife, and proud of her husband. One day, when she had visitors to tea, she told them all about him.

"He's marvelous, my husband," she said. "At this minute he is in the laboratory conducting some experiments. You know, the professor expects to go down to posterity——"

B-r-r-r! Crash! Rattle! came from the direction of the laboratory.

The visitors looked at each other anxiously.

"Dear me!" said one. "I hope the professor hasn't gone!"

Making Sure

"What did I learn to-day, teacher?"

"Why do you ask?"

"They'll want to know at home."

Mary—"Mother."
Mother—"Yes."
Mary—"Teacher says we're here to help others."
Mother—"Of course, we are."
Mary—"Well, what are the others here for?"

BUYERS NEWS

TO STANDARDIZE WOOD FOLDING CHAIRS

—A general conference on the subject of simplification of wood folding and portable chairs was held on December 5, at the Hotel Statler, Buffalo, N. Y. The conference was called by the division of simplified practice, of the Bureau of Standards, U. S. Department of Commerce to take up the proposals for simplifying chair products and to arrange the details for developing a simplified practice recommendation for chair products.

The simplified-practice committee of chair manufacturers is carrying on its studies in cooperation with the National School-Supply Association and is enlisting the support and encouragement of other individuals and organizations interested in the project.

MR MEEKER REPRESENTS KEWAUNEE AS CONSULTANT

The Kewaunee Manufacturing Company, Kewaunee, Wisconsin, through Mr. C. G. Campbell, treasurer and general manager, has announced that Arthur Y. Meeker, formerly vice-president of the Alberene Stone Company for some years, is now associated with them as special representative. His office is located at 70 Fifth Avenue, New York City.

Mr. Meeker will give particular attention to the equipment of laboratories in colleges, universities, hospitals, and large industrial plants, and will cooperate with the company's engineering and educational departments.

The Kewaunee Manufacturing Company has advised the architectural and engineering profession, college and university authorities, and those interested in laboratory problems or construction, that Mr. Meeker's experience is now available for them. The many friends of Mr. Meeker will be glad to learn that business relations which have been established through conscientious service and fair dealing are to be continued in this new capacity with the Kewaunee Manufacturing Company.

MR. PALMER DIES

Mr. Austin N. Palmer, the originator of the Palmer method of writing, who died in November, at his home in New York City, was well known in the school field. He was president of the A. N. Palmer Publishing Company, editor of the American Penman Magazine, and enjoyed the distinction of being the originator and promoter of better penmanship.

The funeral services were held in New York City on November 18, and burial took place at Cedar Rapids, Iowa. The pallbearers were all executives connected with the Palmer Company.

SEATING EQUIPMENT FOR HIGH SCHOOLS

The American Seating Company, Chicago, Ill., has just issued a useful pamphlet, entitled "Seating Equipment for High Schools." The pamphlet which was prepared by Prof. Henry Eastman Bennett, formerly of William-and-Mary College, outlines the fundamental principles which should govern in the selection of hygienic furniture for high-school use. The author points out that in the selection of the proper furniture for school use there must be considered such important points as convenience for janitorial service, sanitary construction, durability, minimum cost of upkeep, arrangement in the room, and adjustments or assignments to fit individual needs.

The pamphlet also touches upon the problem of standard heights for school seats. A practical table of seat heights is given, ranging from 13 to 13¾ in. and from 20 to 20¾ in. Based on the table it is found that one fourth of the seats should be 18 in. high, one half should be 16 in. high, and one fourth still lower. In general it is found that the low seat measures are among the girls and the frail boys. It is among these that postural defects are must common and more serious in permanent results. Special attention has been given to this group of students to provide proper back support and to encourage erect posture. There is also need for an improved type of seating for writing, for library work, and sewing.

ISSUE NEW NORTON CATALOG

The Norton Door Closer Company, the largest manufacturer of automatic door closers, of Chicago, Ill., has issued its new Catalog No. 18, describing and illustrating the Norton liquid door closer of 1900 and the new improved door closer of 1928. The catalog shows the door closer in use in a variety of public buildings and illustrates the varied uses to which it may be put. The booklet gives directions for installing the door closer, offers a table of dimensions and weights, and brief specifications for the use of architects and school officials.

School officials, or architects, who may be interested in door-closing devices may obtain complete information and prices by addressing the Norton Company, at 2900 North Western Ave., Chicago, Ill.

TRADE-MARK DECISION RENDERED IN FAVOR OF GUTTA PERCHA PAINT COMPANY

The Court of Appeals of the District of Columbia recently rendered an important decision in the trade-mark case of the U. S. Gutta Percha Paint Company of Providence, R. I., against Boydell Bros. White Lead & Color Company of Detroit, Mich.

This interesting case had its beginning when the Boydell Bros. White Lead & Color Company sought to register the words, "canned light," as a trade-mark for various mixed paints and paint-enamel, and were opposed by the U. S. Gutta Percha Paint Company on the ground that its mark, "barreled sunlight" is used on the same class of goods. The evidence submitted was sufficient to establish the prior use of the latter mark.

NEW WIDE-FIELD BINOCULAR MICROSCOPE

The Bausch & Lomb Optical Company of Rochester, N. Y., has just placed on the market its new wide-field binocular microscope, which is claimed to be the most useful all-around microscope manufactured by the Bausch & Lomb Company.

The microscope has unusual adaptability under a great variety of circumstances and a few of its many uses are for the purpose of dissecting, for bacteriology, for plant and tree culture, for insect study, for skin diseases, for botany, for tissue study, and for testing materials.

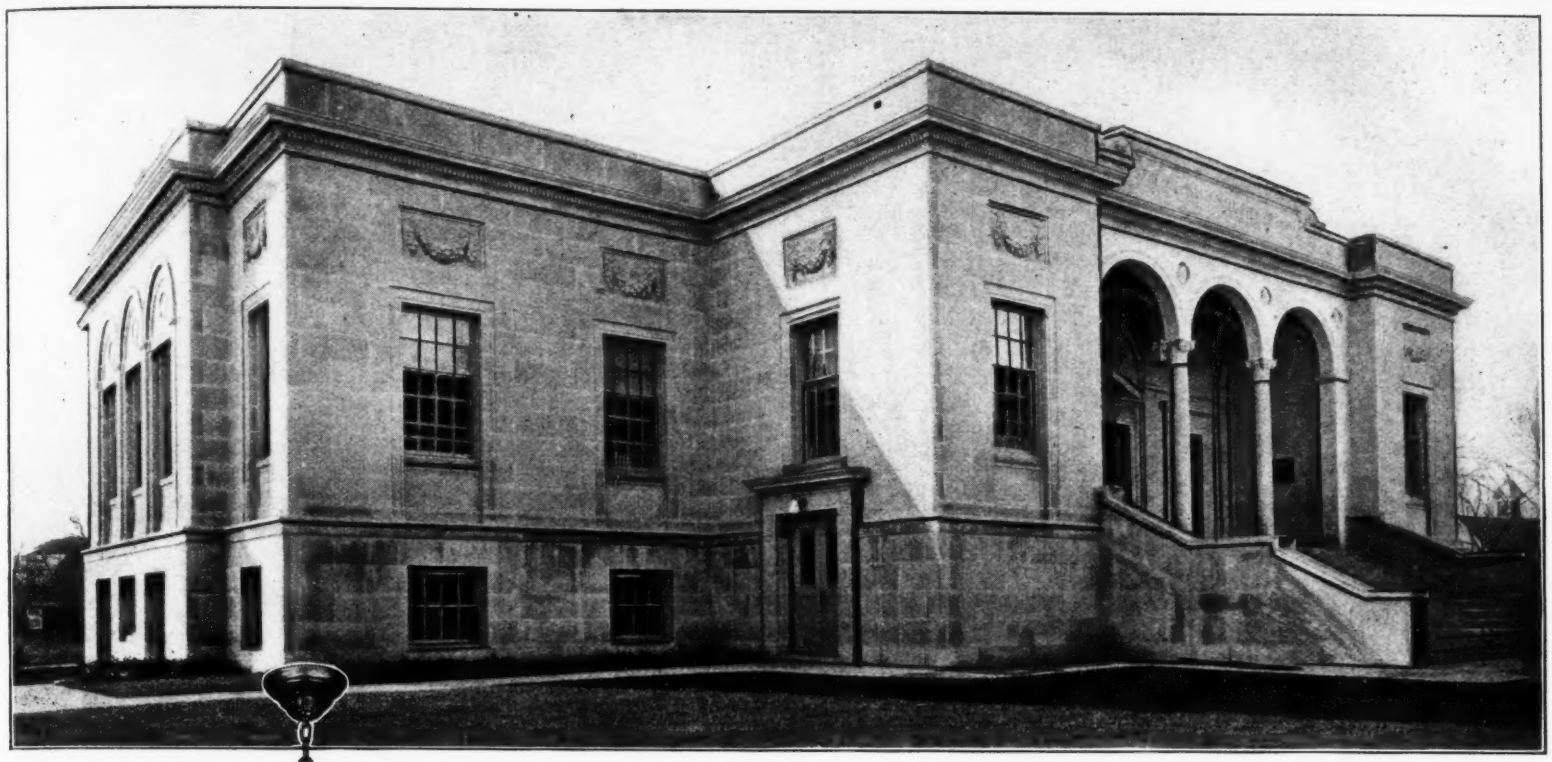
ISSUE NEW CATALOG

Under the title "One Hundred Uses for Pathé Pictures," the Pathé Exchange, 35 West 45th Street, New York City, has issued a new catalog of motion pictures suited for educational and other groups.

CHANGE IN GRADE NAMES FOR OAK FLOORING

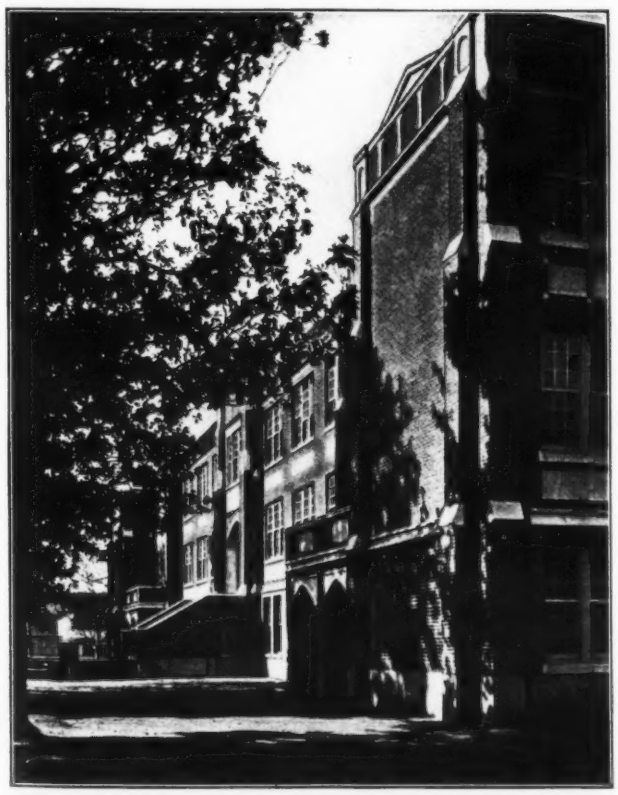
The Oak Flooring Manufacturers' Association, Chicago, Ill., has announced changes in the grade names of oak flooring. The standard grades of oak flooring will be hereafter named as follows:

First grade quartered (old name, clear).
First grade quartered (sap clear).
Second grade quartered (select).
First grade plain (clear).
Second grade plain (select).
Third grade (No. 1. common).
Fourth grade (No. 2 common).



Wm. H. Hall Free Library—Providence, R. I.
GEORGE FREDERICK HALL, ARCHITECT

Ornamental Type
KAYLINE-RADIANT UNIT



Columbia Junior High School—Columbia, S. Car.
JAMES B. URQUHART, ARCHITECT.

Distribution of Light

MEANS eye protection to the children who rely upon you for mental and physical development.

Proper class room illumination demands highly efficient light that is distributed over the whole area.

The Kayline-Radiant Unit attains the greatest [90%] light out-put which is distributed over a 60° zone instead of the average 45° zone. This means more light and equalized illumination throughout the room.

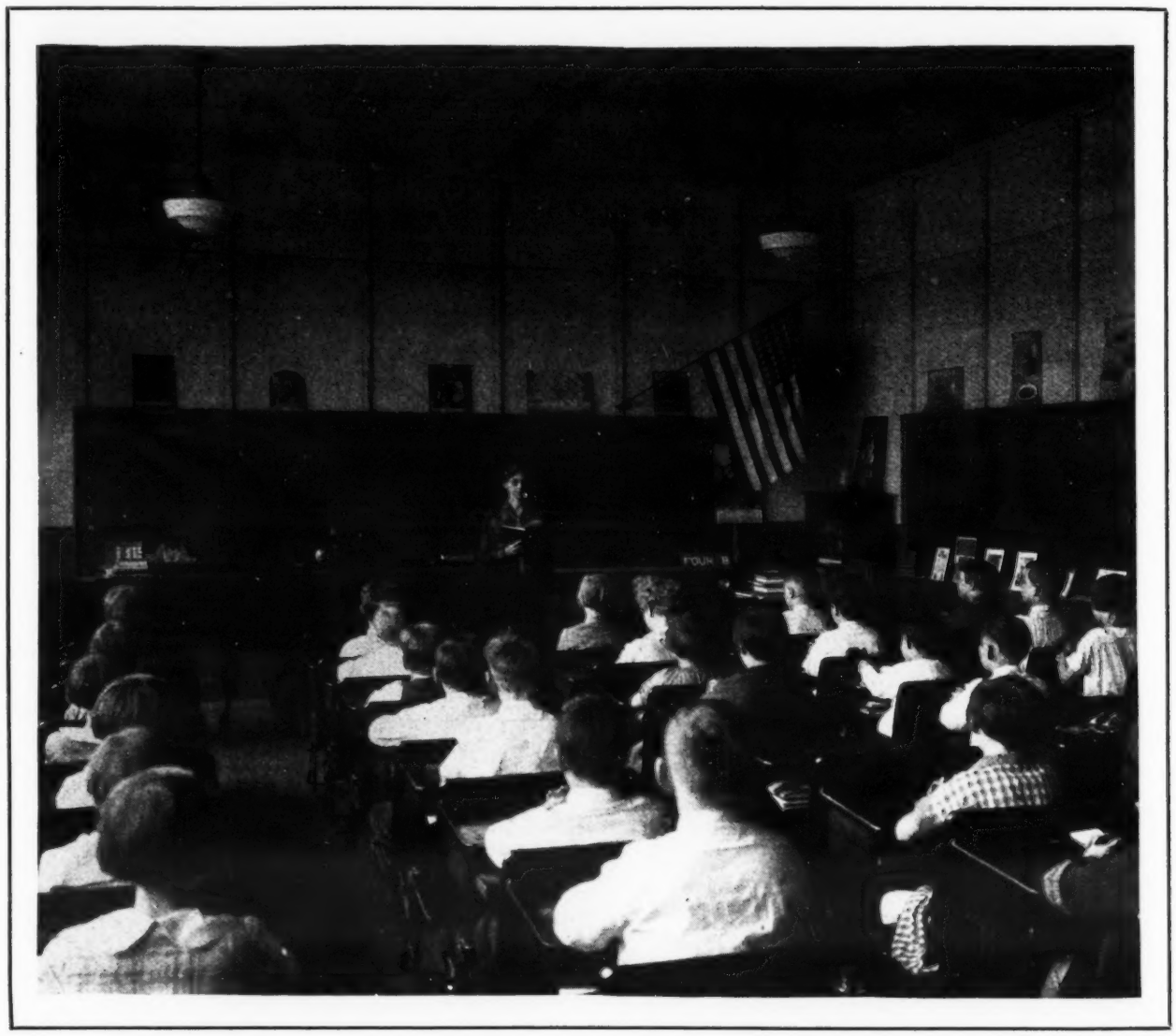
Our engineers will gladly go over your particular lighting requirements, make recommendations and furnish samples for testing—at no cost to you. Catalogs and complete literature will be sent on request.

THE KAYLINE CO.
CLEVELAND, O.

Manufacturers of Lighting Equipment Since 1895

SIXTY-FOUR HOURS

—to erect permanent class rooms for eighty pupils



16 Pages— Facts and Photographs On Schools

Every school official, and individual interested in providing attractive, healthful, practical schools — *at a moderate price* — should read "Schools."

Experts have filled sixteen pages with valuable information on the school building problem — and a way to solve it economically.

Fill out and mail this coupon today.

Circle A Products Corporation
600 South 25th St., Newcastle, Ind.

Send Me "Schools."

Name .....

Address .....

City..... State.....

—at a price so low that bonds need not be issued

In eight days, four men can erect a Circle A School to care for eighty pupils.

These Circle A class rooms are bright and airy —weatherproof and sturdy.

In every room, nine ceiling high windows throw plenty of light over the left shoulders of the pupils. Awning type, these windows keep young minds fresh with an abundance of draft-free air.

Circle A walls are insulated, four-layers thick. They keep pupils undisturbed by outside noise.

And, these insulated walls keep class rooms comfortable in summer—help make them easy to heat in winter.

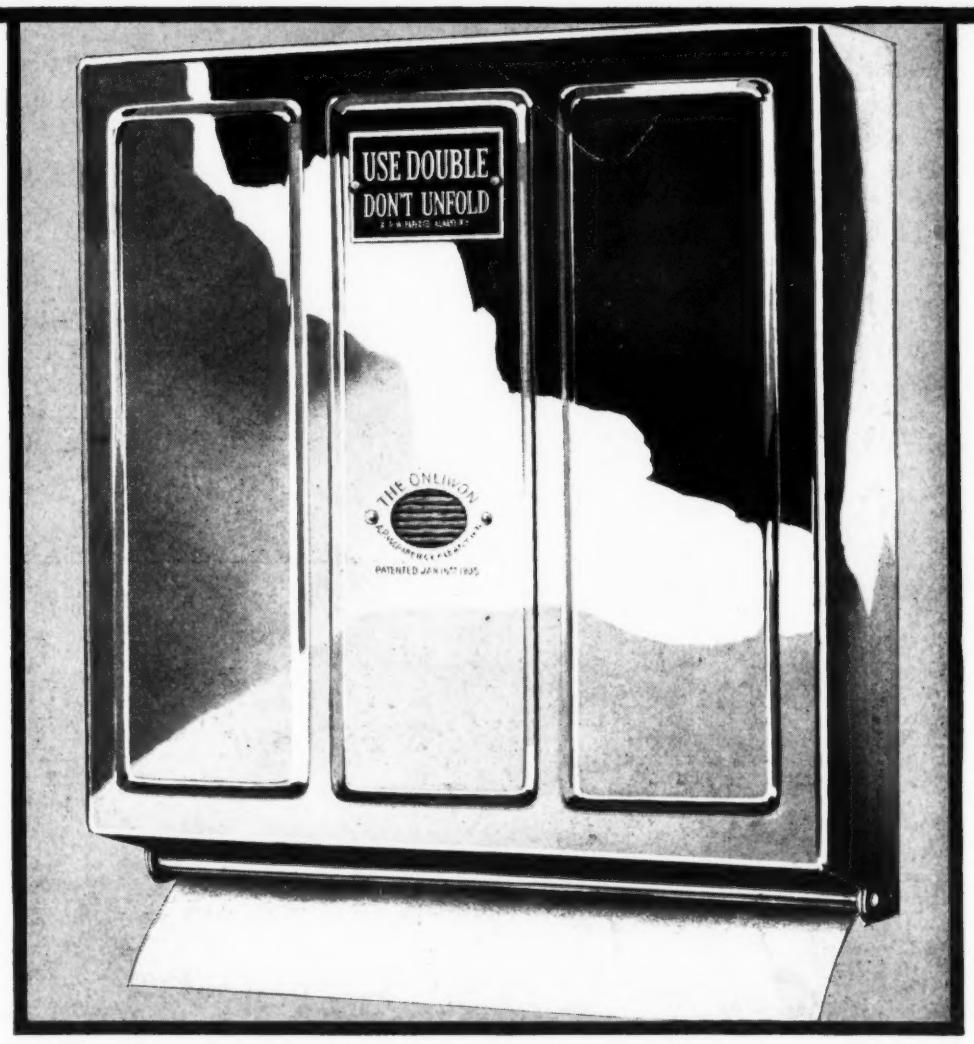
At every three feet the walls are strengthened with a metal reinforced "four-by-four." Corners are made sturdier than most permanent buildings with a metal reinforced "six-by-six."

Moreover, Circle A Schools are priced at a figure that's easy to pay. They treat the school board's budget with consideration.

CIRCLE A PRODUCTS CORPORATION
600 S. 25th STREET **NEWCASTLE, IND.**

CIRCLE (A) SCHOOLS

A. P. W. PAPER COMPANY, ALBANY, N.Y. U.S.A.



Pressed steel Onliwon towel cabinet in rust-proof nickel silver. Yale lock to prevent theft and window to show contents.

Towels . . . one at a time but folded double

ONLIWON service saves money because one Onliwon towel does the work of two ordinary towels.

These towels are double folded, increasing absorbency while doubling the strength of the towel. Wet hands won't tear through it. One is sufficient to wipe completely dry.

And with the Onliwon cabinet, a separate effort is necessary to get a second towel—reducing waste.

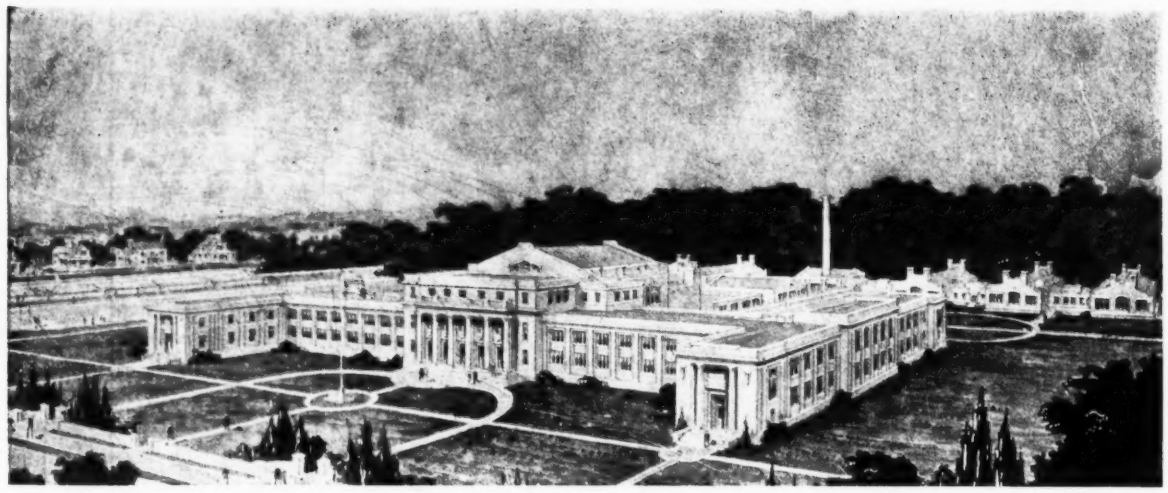
Onliwon cabinets are designed to permit quick servicing—are easy to refill—do not get out of order. They present a neat appearance. Strongly and staunchly built, they last for years.

A. P. W. Paper Company, Albany, New York, U. S. A.

Onliwon

TOILET PAPER AND PAPER TOWEL SERVICE

STANDARD SCHOOL EQUIPMENT

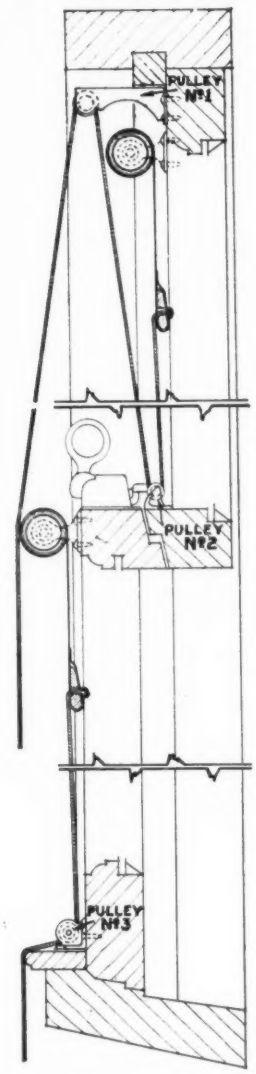


WM. PENN HIGH SCHOOL, HARRISBURG, PA. *Charles Howard Lloyd, Architect*

The Perfect Awning Effect, Without Awnings

WHEN shades are drawn down on the ordinary windows they are very apt to flap and tear because of their resistance to the incoming air, and this obstruction also defeats, to a large extent, the ventilation of the room.

The primary idea back of the Austral Window is to produce *Ventilation Without Draft,* but in addition to this feature the arrangement of the shades on the Austral Window produces a *Perfect Awning Effect.* Separate shades are attached to the upper rail of each sash. Pulleys lock the cords so that the shades may be adjusted at any point on the sash, and thus held, the incoming air neither flaps nor tears them. When the window is open, even with th shades pulled all the way down, air enters without obstruction.



Section Showing Arrangement of Shades and Pulleys. The William Penn High School, as shown above, is equipped throughout with Austral Windows. Charles Howard Lloyd is the Architect.

101 PARK AVE **AUSTRAL WINDOW CO** NEW YORK CITY